What's PHP ?
The PHP Hypertext Preprocessor is a programming language that allows web developers to create dynamic content that interacts with databases. PHP is basically used for developing web based software applications.

What Is a Session?
A session is a logical object created by the PHP engine to allow you to preserve data across subsequent HTTP requests.

There is only one session object available to your PHP scripts at any time. Data saved to the session by a script can be retrieved by the same script or another script when requested from the same visitor.

Sessions are commonly used to store temporary data to allow multiple PHP pages to offer a complete functional transaction for the same visitor.

What is meant by PEAR in php?
Answer1:
PEAR is the next revolution in PHP. This repository is bringing higher level programming to PHP. PEAR is a framework and distribution system for reusable PHP components. It eases installation by bringing an automated wizard, and packing the strength and experience of PHP users into a nicely organised OOP library. PEAR also provides a command-line interface that can be used to automatically install "packages"

Answer2:
PEAR is short for "PHP Extension and Application Repository" and is pronounced just like the fruit. The purpose of PEAR is to provide:
A structured library of open-sourced code for PHP users
A system for code distribution and package maintenance

A standard style for code written in PHP
The PHP Foundation Classes (PFC),
The PHP Extension Community Library (PECL),
A web site, mailing lists and download mirrors to support the PHP/PEAR community
PEAR is a community-driven project with the PEAR Group as the governing body. The project has been founded by Stig S. Bakken in 1999 and quite a lot of people have joined the project since then.

How can we know the number of days between two given dates using PHP?
Simple arithmetic:

```
$date1 = date('Y-m-d');
$date2 = '2006-07-01';
$days = (strtotime() - strtotime()) / (60 * 60 * 24);
echo "Number of days since '2006-07-01': $days";
```

How can we repair a MySQL table?

The syntex for repairing a mysql table is:

```
REPAIR TABLE tablename
REPAIR TABLE tablename QUICK
REPAIR TABLE tablename EXTENDED
```

This command will repair the table specified.
If QUICK is given, MySQL will do a repair of only the index tree.
If EXTENDED is given, it will create index row by row.

What is the difference between $message and $$message?
Anwser 1:
$message is a simple variable whereas $$message is a reference variable. Example:
$user = 'bob'

is equivalent to

```
$holder = 'user';
$$holder = 'bob';
```

Anwser 2:
They are both variables. But $message is a variable with a fixed name. $$message is a variable who's name is stored in $message. For example, if $message contains "var", $$message is the same as $var.

What Is a Persistent Cookie?
A persistent cookie is a cookie which is stored in a cookie file permanently on the browser's computer. By default, cookies are created as temporary cookies which stored only in the browser's memory. When the browser is closed, temporary cookies will be erased. You should decide when to use temporary cookies and when to use persistent cookies based on their differences:
*Temporary cookies can not be used for tracking long-term information.
*Persistent cookies can be used for tracking long-term information.

*Temporary cookies are safer because no programs other than the browser can access them.
*Persistent cookies are less secure because users can open cookie files see the cookie values.

What does a special set of tags <?= and ?> do in PHP?
The output is displayed directly to the browser.

How do you define a constant?
Via define() directive, like define ("MYCONSTANT", 100);

What are the differences between require and include, include_once?
Anwser 1:
require_once() and include_once() are both the functions to include and evaluate the specified file only once. If the specified file is included previous to the present call occurrence, it will not be done again.

But require() and include() will do it as many times they are asked to do.

Anwser 2:
The include_once() statement includes and evaluates the specified file during the execution of the script. This is a behavior similar to the include() statement, with the only difference being that if the code from a file has already been included, it will not be included again. The major difference between include() and require() is that in failure include() produces a warning message whereas require() produces a fatal errors.

Anwser 3:
All three are used to an include file into the current page.
If the file is not present, require(), calls a fatal error, while in include() does not.
The include_once() statement includes and evaluates the specified file during the execution of the script. This is a behavior similar to the include() statement, with the only difference being that if the code from a file has already been included, it will not be included again. It des not call a fatal error if file not exists. require_once() does the same as include_once(), but it calls a fatal error if file not exists.

Anwser 4:
File will not be included more than once. If we want to include a file once only and further calling of the file will be ignored then we have to use the PHP function include_once(). This will prevent problems with function redefinitions, variable value reassignments, etc.

What is meant by urlencode and urldecode?
Anwser 1:
urlencode() returns the URL encoded version of the given string. URL coding converts special characters into % signs followed by two hex digits. For example: urlencode("10.00%") will return "10%2E00%25". URL encoded strings are safe to be used as part of URLs.
urldecode() returns the URL decoded version of the given string.

Anwser 2:
string urlencode(str) - Returns the URL encoded version of the input string. String values to be used in URL query string need to be URL encoded. In the URL encoded version:

Alphanumeric characters are maintained as is.
Space characters are converted to "+" characters.

Other non-alphanumeric characters are converted "%" followed by two hex digits representing the converted character.

string urldecode(str) - Returns the original string of the input URL encoded string.

For example:

$discount ="10.00%";
$url = "http://domain.com/submit.php?disc=".urlencode($discount);
echo $url;

You will get "http://domain.com/submit.php?disc=10%2E00%25".

How To Get the Uploaded File Information in the Receiving Script?

Once the Web server received the uploaded file, it will call the PHP script specified in the form action attribute to process them. This receiving PHP script can get the uploaded file information through the predefined array called $_FILES. Uploaded file information is organized in $_FILES as a two-dimensional array as:
$_FILES[$fieldName]['name'] - The Original file name on the browser system.
$_FILES[$fieldName]['type'] - The file type determined by the browser.
$_FILES[$fieldName]['size'] - The Number of bytes of the file content.
$_FILES[$fieldName]['tmp_name'] - The temporary filename of the file in which the uploaded file was stored on the server.
$_FILES[$fieldName]['error'] - The error code associated with this file upload.

The $fieldName is the name used in the <INPUT TYPE=FILE, NAME=fieldName>.

What is the difference between mysql_fetch_object and mysql_fetch_array?
MySQL fetch object will collect first single matching record where mysql_fetch_array will collect all matching records from the table in an array

How can I execute a PHP script using command line?
Just run the PHP CLI (Command Line Interface) program and provide the PHP script file name as the command line argument. For example, "php myScript.php", assuming "php" is the command to invoke the CLI program.
Be aware that if your PHP script was written for the Web CGI interface, it may not execute properly in command line environment.

I am trying to assign a variable the value of 0123, but it keeps coming up with a different number, what's the problem?
PHP Interpreter treats numbers beginning with 0 as octal. Look at the similar PHP interview questions for more numeric problems.

Would I use print "$a dollars" or "{$a} dollars" to print out the amount of dollars in this example?
In this example it wouldn't matter, since the variable is all by itself, but if you were to print something like "{$a},000,000 mln dollars", then you definitely need to use the braces.

What are the different tables present in MySQL? Which type of table is generated when we are

creating a table in the following syntax: create table employee(eno int(2),ename varchar(10))?
Total 5 types of tables we can create
1. MyISAM
2. Heap
3. Merge
4. INNO DB
5. ISAM
MyISAM is the default storage engine as of MySQL 3.23. When you fire the above create query
MySQL will create a MyISAM table.

How To Create a Table?
If you want to create a table, you can run the CREATE TABLE statement as shown in the following
sample script:

```php
<?php
include "mysql_connection.php";

$sql = "CREATE TABLE Tech_links ("
. " id INTEGER NOT NULL"
. ", url VARCHAR(80) NOT NULL"
. ", notes VARCHAR(1024)"
. ", counts INTEGER"
. ", time TIMESTAMP DEFAULT sysdate()"
. ")";
if (mysql_query($sql, $con)) {
print("Table Tech_links created.\n");
} else {
print("Table creation failed.\n");
}

mysql_close($con);
?>
```

Remember that mysql_query() returns TRUE/FALSE on CREATE statements. If you run this script,
you will get something like this:
Table Tech_links created.

How can we encrypt the username and password using PHP?
Answer1
You can encrypt a password with the following Mysql>SET PASSWORD=PASSWORD("Password");

Answer2
You can use the MySQL PASSWORD() function to encrypt username and password. For example,
INSERT into user (password, ...) VALUES (PASSWORD($password")), ...);

How do you pass a variable by value?
Just like in C++, put an ampersand in front of it, like $a = &$b

What is the functionality of the functions STRSTR() and STRISTR()?

string strstr (string haystack, string needle) returns part of haystack string from the first occurrence of needle to the end of haystack. This function is case-sensitive.

stristr() is identical to strstr() except that it is case insensitive.

When are you supposed to use endif to end the conditional statement?

When the original if was followed by : and then the code block without braces.

How can we send mail using JavaScript?

No. There is no way to send emails directly using JavaScript.

But you can use JavaScript to execute a client side email program send the email using the "mailto" code. Here is an example:

```
function myfunction(form)
{
tdata=document.myform.tbox1.value;
location="mailto:mailid@domain.com?subject=...";
return true;
}
```

What is the functionality of the function strstr and stristr?

strstr() returns part of a given string from the first occurrence of a given substring to the end of the string. For example: strstr("user@example.com","@") will return "@example.com".
stristr() is identical to strstr() except that it is case insensitive.

What is the difference between ereg_replace() and eregi_replace()?

eregi_replace() function is identical to ereg_replace() except that it ignores case distinction when matching alphabetic characters.

How do I find out the number of parameters passed into function9. ?

func_num_args() function returns the number of parameters passed in.

What is the purpose of the following files having extensions: frm, myd, and myi? What these files contain?

In MySQL, the default table type is MyISAM.
Each MyISAM table is stored on disk in three files. The files have names that begin with the table name and have an extension to indicate the file type.

The '.frm' file stores the table definition.
The data file has a '.MYD' (MYData) extension.
The index file has a '.MYI' (MYIndex) extension,

If the variable $a is equal to 5 and variable $b is equal to character a, what's the value of $$b?

100, it's a reference to existing variable.

How To Protect Special Characters in Query String?

If you want to include special characters like spaces in the query string, you need to protect them by applying the urlencode() translation function. The script below shows how to use urlencode():

```php
<?php
print("<html>");
print("<p>Please click the links below"
." to submit comments about TECHPreparation.com:</p>");
$comment = 'I want to say: "It\'s a good site! :->"';
$comment = urlencode($comment);
print("<p>"
."<a href=\"processing_forms.php?name=Guest&comment=$comment\">"
."It's an excellent site!</a></p>");
$comment = 'This visitor said: "It\'s an average site! :-("';
$comment = urlencode($comment);
print("<p>"
.'<a href="processing_forms.php?'.$comment.'">'
."It's an average site.</a></p>");
print("</html>");
?>
```

Are objects passed by value or by reference?
Everything is passed by value.

What are the differences between DROP a table and TRUNCATE a table?
DROP TABLE table_name - This will delete the table and its data.

TRUNCATE TABLE table_name - This will delete the data of the table, but not the table definition.

How do you call a constructor for a parent class?
parent::constructor($value)

WHAT ARE THE DIFFERENT TYPES OF ERRORS IN PHP?
Here are three basic types of runtime errors in PHP:

1. Notices: These are trivial, non-critical errors that PHP encounters while executing a script - for example, accessing a variable that has not yet been defined. By default, such errors are not displayed to the user at all - although you can change this default behavior.

2. Warnings: These are more serious errors - for example, attempting to include() a file which does not exist. By default, these errors are displayed to the user, but they do not result in script termination.

3. Fatal errors: These are critical errors - for example, instantiating an object of a non-existent class, or calling a non-existent function. These errors cause the immediate termination of the script, and PHP's default behavior is to display them to the user when they take place.

Internally, these variations are represented by twelve different error types

What's the special meaning of __sleep and __wakeup?
__sleep returns the array of all the variables than need to be saved, while __wakeup retrieves them.

How can we submit a form without a submit button?
If you don't want to use the Submit button to submit a form, you can use normal hyper links to submit a form. But you need to use some JavaScript code in the URL of the link. For example:

Submit Me

Why doesn't the following code print the newline properly? <?php $str = 'Hello, there.\nHow are you?\nThanks for visiting techpreparation'; print $str; ?>

Because inside the single quotes the \n character is not interpreted as newline, just as a sequence of two characters - \ and n.

Would you initialize your strings with single quotes or double quotes?

Since the data inside the single-quoted string is not parsed for variable substitution, it's always a better idea speed-wise to initialize a string with single quotes, unless you specifically need variable substitution.

How can we extract string 'abc.com ' from a string http://info@abc.com using regular expression of php?

 We can use the preg_match() function with "/.*@(.*)$/" as
the regular expression pattern. For example:
preg_match("/.*@(.*)$/","http://info@abc.com",$data);
echo $data[1];

What are the differences between GET and POST methods in form submitting, give the case where we can use GET and we can use POST methods?
Anwser 1:

When we submit a form, which has the GET method it displays pair of name/value used in the form at the address bar of the browser preceded by url. Post method doesn't display these values.

Anwser 2:

When you want to send short or small data, not containing ASCII characters, then you can use GET"
Method. But for long data sending, say more then 100 character you can use POST method.

Once most important difference is when you are sending the form with GET method. You can see the output which you are sending in the address bar. Whereas if you send the form with POST" method then user can not see that information.

Anwser 3:

What are "GET" and "POST"?

GET and POST are methods used to send data to the server: With the GET method, the browser appends the data onto the URL. With the Post method, the data is sent as "standard input."

Major Difference

In simple words, in POST method data is sent by standard input (nothing shown in URL when posting while in GET method data is sent through query string.

Ex: Assume we are logging in with username and password.

GET: we are submitting a form to login.php, when we do submit or similar action, values are sent through visible query string (notice ./login.php?username=...&password=... as URL when executing the script login.php) and is retrieved by login.php by $_GET['username'] and $_GET['password'].

POST: we are submitting a form to login.php, when we do submit or similar action, values are sent through invisible standard input (notice ./login.php) and is retrieved by login.php by $_POST['username'] and $_POST['password'].

POST is assumed more secure and we can send lot more data than that of GET method is limited (they say Internet Explorer can take care of maximum 2083 character as a query string).

Anwser 4:

In the get method the data made available to the action page (where data is received) by the URL so data can be seen in the address bar. Not advisable if you are sending login info like password etc. In the post method the data will be available as data blocks and not as query string in case of get method.

Anwser 5:

When we submit a form, which has the GET method it pass value in the form of query string (set of name/value pair) and display along with URL. With GET we can a small data submit from the form (a set of 255 character) whereas Post method doesn't display value with URL. It passes value in the form of Object and we can submit large data from the form.

Anwser 6:

On the server side, the main difference between GET and POST is where the submitted is stored. The $_GET array stores data submitted by the GET method. The $_POST array stores data submitted by the POST method.
On the browser side, the difference is that data submitted by the GET method will be displayed in the browser's address field. Data submitted by the POST method will not be displayed anywhere on the browser.
GET method is mostly used for submitting a small amount and less sensitive data. POST method is mostly used for submitting a large amount or sensitive data.

What is the difference between the functions unlink and unset?
unlink() is a function for file system handling. It will simply delete the file in context.

unset() is a function for variable management. It will make a variable undefined.

How come the code works, but doesn't for two-dimensional array of mine?
Any time you have an array with more than one dimension, complex parsing syntax is required. print "Contents: {$arr[1][2]}" would've worked.

How can we register the variables into a session?
session_register($session_var);

$_SESSION['var'] = 'value';

What is the difference between characters \023 and \x23?
The first one is octal 23, the second is hex 23.

With a heredoc syntax, do I get variable substitution inside the heredoc contents?
Yes.

How can we submit form without a submit button?
We can use a simple JavaScript code linked to an event trigger of any form field. In the JavaScript code, we can call the document.form.submit() function to submit the form. For example: <input type=button value="Save" onClick="document.form.submit()">

How can we create a database using PHP and mysql?
We can create MySQL database with the use of mysql_create_db($databaseName) to create a database.

How many ways we can retrieve the date in result set of mysql using php?
As individual objects so single record or as a set or arrays.

Can we use include ("abc.php") two times in a php page "makeit.php"?
Yes.

For printing out strings, there are echo, print and printf. Explain the differences.
echo is the most primitive of them, and just outputs the contents following the construct to the screen. print is also a construct (so parentheses are optional when calling it), but it returns TRUE on successful output and FALSE if it was unable to print out the string. However, you can pass multiple parameters to echo, like:

<?php echo 'Welcome ', 'to', ' ', 'techpreparations!'; ?>

and it will output the string "Welcome to techpreparations!" print does not take multiple parameters. It is also generally argued that echo is faster, but usually the speed advantage is negligible, and might not be there for future versions of PHP. printf is a function, not a construct, and allows such advantages as formatted output, but it's the slowest way to print out data out of echo, print and printf.

I am writing an application in PHP that outputs a printable version of driving directions. It contains some long sentences, and I am a neat freak, and would like to make sure that no line exceeds 50 characters. How do I accomplish that with PHP?
On large strings that need to be formatted according to some length specifications, use wordwrap() or chunk_split().

What's the output of the ucwords function in this example?
$formatted = ucwords("TECHPREPARATIONS IS COLLECTION OF INTERVIEW QUESTIONS");
print $formatted;
What will be printed is TECHPREPARATIONS IS COLLECTION OF INTERVIEW QUESTIONS.
ucwords() makes every first letter of every word capital, but it does not lower-case anything else. To avoid this, and get a properly formatted string, it's worth using strtolower() first.

What's the difference between htmlentities() and htmlspecialchars()?
htmlspecialchars only takes care of <, >, single quote ', double quote " and ampersand. htmlentities translates all occurrences of character sequences that have different meaning in HTML.

How can we extract string "abc.com" from a string "mailto:info@abc.com?subject=Feedback" using regular expression of PHP?
$text = "mailto:info@abc.com?subject=Feedback";
preg_match('|.*@([^?]*)|', $text, $output);
echo $output[1];

Note that the second index of $output, $output[1], gives the match, not the first one, $output[0].

So if md5() generates the most secure hash, why would you ever use the less secure crc32() and sha1()?
Crypto usage in PHP is simple, but that doesn't mean it's free. First off, depending on the data that you're encrypting, you might have reasons to store a 32-bit value in the database instead of the 160-bit value to save on space. Second, the more secure the crypto is, the longer is the computation time to deliver the hash value. A high volume site might be significantly slowed down, if frequent md5() generation is required.

How can we destroy the session, how can we unset the variable of a session?
session_unregister() - Unregister a global variable from the current session
session_unset() - Free all session variables

What are the different functions in sorting an array?
Sorting functions in PHP:
asort()
arsort()
ksort()
krsort()
uksort()
sort()
natsort()
rsort()

How can we know the count/number of elements of an array?
2 ways:
a) sizeof($array) - This function is an alias of count()
b) count($urarray) - This function returns the number of elements in an array.
Interestingly if you just pass a simple var instead of an array, count() will return 1.

How many ways we can pass the variable through the navigation between the pages?
At least 3 ways:

1. Put the variable into session in the first page, and get it back from session in the next page.
2. Put the variable into cookie in the first page, and get it back from the cookie in the next page.
3. Put the variable into a hidden form field, and get it back from the form in the next page.

What is the maximum length of a table name, a database name, or a field name in MySQL?
Database name: 64 characters
Table name: 64 characters
Column name: 64 characters

How many values can the SET function of MySQL take?

MySQL SET function can take zero or more values, but at the maximum it can take 64 values.

What are the other commands to know the structure of a table using MySQL commands except EXPLAIN command?
DESCRIBE table_name;

How can we find the number of rows in a table using MySQL?
Use this for MySQL

SELECT COUNT(*) FROM table_name;

What's the difference between md5(), crc32() and sha1() crypto on PHP?
The major difference is the length of the hash generated. CRC32 is, evidently, 32 bits, while sha1() returns a 128 bit value, and md5() returns a 160 bit value. This is important when avoiding collisions.

How can we find the number of rows in a result set using PHP?
Here is how can you find the number of rows in a result set in PHP:

$result = mysql_query($any_valid_sql, $database_link);
$num_rows = mysql_num_rows($result);
echo "$num_rows rows found";

How many ways we can we find the current date using MySQL?
SELECT CURDATE();
SELECT CURRENT_DATE();
SELECT CURTIME();
SELECT CURRENT_TIME();

Give the syntax of GRANT commands?
The generic syntax for GRANT is as following

GRANT [rights] on [database] TO [username@hostname] IDENTIFIED BY [password]

Now rights can be:
a) ALL privilages
b) Combination of CREATE, DROP, SELECT, INSERT, UPDATE and DELETE etc.

We can grant rights on all databse by usingh *.* or some specific database by database.* or a specific table by database.table_name.

Give the syntax of REVOKE commands?
The generic syntax for revoke is as following

REVOKE [rights] on [database] FROM [username@hostname]

Now rights can be:
a) ALL privileges
b) Combination of CREATE, DROP, SELECT, INSERT, UPDATE and DELETE etc.

We can grant rights on all database by using *.* or some specific database by database.* or a specific

table by database.table_name.

What is the difference between CHAR and VARCHAR data types?
CHAR is a fixed length data type. CHAR(n) will take n characters of storage even if you enter less than n characters to that column. For example, "Hello!" will be stored as "Hello! " in CHAR(10) column.

VARCHAR is a variable length data type. VARCHAR(n) will take only the required storage for the actual number of characters entered to that column. For example, "Hello!" will be stored as "Hello!" in VARCHAR(10) column.

How can we encrypt and decrypt a data present in a mysql table using mysql?
AES_ENCRYPT() and AES_DECRYPT()

Will comparison of string "10" and integer 11 work in PHP?
Yes, internally PHP will cast everything to the integer type, so numbers 10 and 11 will be compared.

What is the functionality of MD5 function in PHP?
string md5(string)

It calculates the MD5 hash of a string. The hash is a 32-character hexadecimal number.

How can I load data from a text file into a table?
The MySQL provides a LOAD DATA INFILE command. You can load data from a file. Great tool but you need to make sure that:

a) Data must be delimited
b) Data fields must match table columns correctly

How can we know the number of days between two given dates using MySQL?
Use DATEDIFF()

SELECT DATEDIFF(NOW(),'2006-07-01');

How can we change the name of a column of a table?
This will change the name of column:

ALTER TABLE table_name CHANGE old_colm_name new_colm_name

How can we change the data type of a column of a table?
This will change the data type of a column:

ALTER TABLE table_name CHANGE colm_name same_colm_name [new data type]

What is the difference between GROUP BY and ORDER BY in SQL?
To sort a result, use an ORDER BY clause.
The most general way to satisfy a GROUP BY clause is to scan the whole table and create a new temporary table where all rows from each group are consecutive, and then use this temporary table to discover groups and apply aggregate functions (if any).
ORDER BY [col1],[col2],...[coln]; Tells DBMS according to what columns it should sort the result. If two rows will have the same value in col1 it will try to sort them according to col2 and so on.
GROUP BY [col1],[col2],...[coln]; Tells DBMS to group (aggregate) results with same value of

column col1. You can use COUNT(col1), SUM(col1), AVG(col1) with it, if you want to count all items in group, sum all values or view average.

What is meant by MIME?
Answer 1:
MIME is Multipurpose Internet Mail Extensions is an Internet standard for the format of e-mail. However browsers also uses MIME standard to transmit files. MIME has a header which is added to a beginning of the data. When browser sees such header it shows the data as it would be a file (for example image)
Some examples of MIME types:
audio/x-ms-wmp
image/png
application/x-shockwave-flash

Answer 2:
Multipurpose Internet Mail Extensions.
WWW's ability to recognize and handle files of different types is largely dependent on the use of the MIME (Multipurpose Internet Mail Extensions) standard. The standard provides for a system of registration of file types with information about the applications needed to process them. This information is incorporated into Web server and browser software, and enables the automatic recognition and display of registered file types. …

How can we know that a session is started or not?
A session starts by session_start() function.
This session_start() is always declared in header portion. it always declares first. then we write session_register().

What are the differences between mysql_fetch_array(), mysql_fetch_object(), mysql_fetch_row()?
Answer 1:
mysql_fetch_array() -> Fetch a result row as a combination of associative array and regular array.
mysql_fetch_object() -> Fetch a result row as an object.
mysql_fetch_row() -> Fetch a result set as a regular array().

Answer 2:
The difference between mysql_fetch_row() and mysql_fetch_array() is that the first returns the results in a numeric array ($row[0], $row[1], etc.), while the latter returns a the results an array containing both numeric and associative keys ($row['name'], $row['email'], etc.). mysql_fetch_object() returns an object ($row->name, $row->email, etc.).

If we login more than one browser windows at the same time with same user and after that we close one window, then is the session is exist to other windows or not? And if yes then why? If no then why?
Session depends on browser. If browser is closed then session is lost. The session data will be deleted after session time out. If connection is lost and you recreate connection, then session will continue in the browser.

What are the MySQL database files stored in system ?
Data is stored in name.myd

Table structure is stored in name.frm
Index is stored in name.myi

What is the difference between PHP4 and PHP5?
PHP4 cannot support oops concepts and Zend engine 1 is used.

PHP5 supports oops concepts and Zend engine 2 is used.
Error supporting is increased in PHP5.
XML and SQLLite will is increased in PHP5.

Can we use include(abc.PHP) two times in a PHP page makeit.PHP"?
Yes we can include that many times we want, but here are some things to make sure of:
(including abc.PHP, the file names are case-sensitive)
there shouldn't be any duplicate function names, means there should not be functions or classes or variables with the same name in abc.PHP and makeit.php

What are the differences between mysql_fetch_array(), mysql_fetch_object(), mysql_fetch_row()?
mysql_fetch_array - Fetch a result row as an associative array and a numeric array.

mysql_fetch_object - Returns an object with properties that correspond to the fetched row and moves the internal data pointer ahead. Returns an object with properties that correspond to the fetched row, or FALSE if there are no more rows

mysql_fetch_row() - Fetches one row of data from the result associated with the specified result identifier. The row is returned as an array. Each result column is stored in an array offset, starting at offset 0.

What is meant by nl2br()?
Anwser1:
nl2br() inserts a HTML tag <br> before all new line characters \n in a string.

echo nl2br("god bless \n you");

output:
god bless
you

How can we encrypt and decrypt a data presented in a table using MySQL?
You can use functions: AES_ENCRYPT() and AES_DECRYPT() like:

AES_ENCRYPT(str, key_str)
AES_DECRYPT(crypt_str, key_str)

How can I retrieve values from one database server and store them in other database server using PHP?
For this purpose, you can first read the data from one server into session variables. Then connect to other server and simply insert the data into the database.

Who is the father of PHP and what is the current version of PHP and MYSQL?

Rasmus Lerdorf.
PHP 5.1. Beta
MySQL 5.0

In how many ways we can retrieve data in the result set of MYSQL using PHP?
mysql_fetch_array - Fetch a result row as an associative array, a numeric array, or both
mysql_fetch_assoc - Fetch a result row as an associative array
mysql_fetch_object - Fetch a result row as an object
mysql_fetch_row —- Get a result row as an enumerated array

What are the functions for IMAP?
imap_body - Read the message body
imap_check - Check current mailbox
imap_delete - Mark a message for deletion from current mailbox
imap_mail - Send an email message

What are encryption functions in PHP?
CRYPT()
MD5()

What is the difference between htmlentities() and htmlspecialchars()?
htmlspecialchars() - Convert some special characters to HTML entities (Only the most widely used)
htmlentities() - Convert ALL special characters to HTML entities

What is the functionality of the function htmlentities?
htmlentities() - Convert all applicable characters to HTML entities
This function is identical to htmlspecialchars() in all ways, except with htmlentities(), all characters which have HTML character entity equivalents are translated into these entities.

How can we get the properties (size, type, width, height) of an image using php image functions?
To know the image size use getimagesize() function
To know the image width use imagesx() function
To know the image height use imagesy() function

How can we increase the execution time of a php script?
By the use of void set_time_limit(int seconds)
Set the number of seconds a script is allowed to run. If this is reached, the script returns a fatal error. The default limit is 30 seconds or, if it exists, the max_execution_time value defined in the php.ini. If seconds is set to zero, no time limit is imposed.

When called, set_time_limit() restarts the timeout counter from zero. In other words, if the timeout is the default 30 seconds, and 25 seconds into script execution a call such as set_time_limit(20) is made, the script will run for a total of 45 seconds before timing out.

HOW CAN WE TAKE A BACKUP OF A MYSQL TABLE AND HOW CAN WE RESTORE IT?
Answer 1:
Create a full backup of your database: shell> mysqldump tab=/path/to/some/dir opt db_name
Or: shell> mysqlhotcopy db_name /path/to/some/dir
The full backup file is just a set of SQL statements, so restoring it is very easy:

shell> mysql "."Executed";

Answer 2:
To backup: BACKUP TABLE tbl_name TO /path/to/backup/directory
' To restore: RESTORE TABLE tbl_name FROM /path/to/backup/directory

mysqldump: Dumping Table Structure and Data

Utility to dump a database or a collection of database for backup or for transferring the data to another SQL server (not necessarily a MySQL server). The dump will contain SQL statements to create the table and/or populate the table.
-t, no-create-info
Don't write table creation information (the CREATE TABLE statement).
-d, no-data
Don't write any row information for the table. This is very useful if you just want to get a dump of the structure for a table!

How to set cookies?
setcookie('variable','value','time')
;
variable - name of the cookie variable
value - value of the cookie variable
time - expiry time
Example: setcookie('Test',$i,time()+3600);

Test - cookie variable name
$i - value of the variable 'Test'
time()+3600 - denotes that the cookie will expire after an one hour

How to reset/destroy a cookie ?
Reset a cookie by specifying expire time in the past:
Example: setcookie('Test',$i,time()-3600); // already expired time

Reset a cookie by specifying its name only
Example: setcookie('Test');

What types of images that PHP supports ?
Using imagetypes() function to find out what types of images are supported in your PHP engine.
imagetypes() - Returns the image types supported.
This function returns a bit-field corresponding to the image formats supported by the version of GD linked into PHP. The following bits are returned, IMG_GIF | IMG_JPG | IMG_PNG | IMG_WBMP | IMG_XPM.

Check if a variable is an integer in JAVASCRIPT ?
var myValue =9.8;
if(parseInt(myValue)== myValue)
alert('Integer');
else

alert('Not an integer');

Tools used for drawing ER diagrams.
Case Studio
Smart Draw

How can I know that a variable is a number or not using a JavaScript?
Answer 1:
bool is_numeric(mixed var)
Returns TRUE if var is a number or a numeric string, FALSE otherwise.

Answer 2:
Definition and Usage
The isNaN() function is used to check if a value is not a number.

Syntax
isNaN(number)

Parameter Description
number Required. The value to be tested

How can we submit from without a submit button?
Trigger the JavaScript code on any event (like onSelect of drop down list box, onfocus, etc)
document.myform.submit(); This will submit the form.

How many ways can we get the value of current session id?
session_id() returns the session id for the current session.

How can we destroy the cookie?
Set the cookie with a past expiration time.

What are the current versions of Apache, PHP, and MySQL?
PHP: PHP 5.1.2
MySQL: MySQL 5.1
Apache: Apache 2.1

What are the reasons for selecting LAMP (Linux, Apache, MySQL, Php) instead of combination of other software programs, servers and operating systems?
All of those are open source resource. Security of Linux is very more than windows. Apache is a better server that IIS both in functionality and security. Mysql is world most popular open source database. Php is more faster that asp or any other scripting language.

What are the features and advantages of OBJECT ORIENTED PROGRAMMING?
One of the main advantages of OO programming is its ease of modification; objects can easily be modified and added to a system there by reducing maintenance costs. OO programming is also considered to be better at modeling the real world than is procedural programming. It allows for more complicated and flexible interactions. OO systems are also easier for non-technical personnel to understand and easier for them to participate in the maintenance and enhancement of a system because it appeals to natural human cognition patterns. For some systems, an OO approach can speed development time since many objects are standard across systems and can be reused. Components that manage dates, shipping, shopping carts, etc. can be purchased and easily modified for a specific

system.

How can we get second of the current time using date function?
$second = date("s");

What is the use of friend function?
Friend functions
Sometimes a function is best shared among a number of different classes. Such functions can be declared either as member functions of one class or as global functions. In either case they can be set to be friends of other classes, by using a friend specifier in the class that is admitting them. Such functions can use all attributes of the class which names them as a friend, as if they were themselves members of that class.
A friend declaration is essentially a prototype for a member function, but instead of requiring an implementation with the name of that class attached by the double colon syntax, a global function or member function of another class provides the match.

```
class mylinkage
{
private:
mylinkage * prev;
mylinkage * next;

protected:
friend void set_prev(mylinkage* L, mylinkage* N);
void set_next(mylinkage* L);

public:
mylinkage * succ();
mylinkage * pred();
mylinkage();
};

void mylinkage::set_next(mylinkage* L) { next = L; }

void set_prev(mylinkage * L, mylinkage * N ) { N->prev = L; }
```

Friends in other classes
It is possible to specify a member function of another class as a friend as follows:
```
class C
{
friend int B::f1();
};
class B
{
int f1();
};
```

It is also possible to specify all the functions in another class as friends, by specifying the entire class as

a friend.
```
class A
{
friend class B;
};
```

Friend functions allow binary operators to be defined which combine private data in a pair of objects. This is particularly powerful when using the operator overloading features of C++. We will return to it when we look at overloading.

How can we get second of the current time using date function?
$second = date("s");

What is the maximum size of a file that can be uploaded using PHP and how can we change this?
You can change maximum size of a file set upload_max_filesize variable in php.ini file

How can I make a script that can be bilingual (supports English, German)?
You can change char set variable in above line in the script to support bi language.

What are the difference between abstract class and interface?
Abstract class: abstract classes are the class where one or more methods are abstract but not necessarily all method has to be abstract. Abstract methods are the methods, which are declare in its class but not define. The definition of those methods must be in its extending class.

Interface: Interfaces are one type of class where all the methods are abstract. That means all the methods only declared but not defined. All the methods must be define by its implemented class.

What are the advantages of stored procedures, triggers, indexes?
A stored procedure is a set of SQL commands that can be compiled and stored in the server. Once this has been done, clients don't need to keep re-issuing the entire query but can refer to the stored procedure. This provides better overall performance because the query has to be parsed only once, and less information needs to be sent between the server and the client. You can also raise the conceptual level by having libraries of functions in the server. However, stored procedures of course do increase the load on the database server system, as more of the work is done on the server side and less on the client (application) side. Triggers will also be implemented. A trigger is effectively a type of stored procedure, one that is invoked when a particular event occurs. For example, you can install a stored procedure that is triggered each time a record is deleted from a transaction table and that stored procedure automatically deletes the corresponding customer from a customer table when all his transactions are deleted. Indexes are used to find rows with specific column values quickly. Without an index, MySQL must begin with the first row and then read through the entire table to find the relevant rows. The larger the table, the more this costs. If the table has an index for the columns in question, MySQL can quickly determine the position to seek to in the middle of the data file without having to look at all the data. If a table has 1,000 rows, this is at least 100 times faster than reading sequentially. If you need to access most of the rows, it is faster to read sequentially, because this minimizes disk seeks.

What is maximum size of a database in mysql?
If the operating system or filesystem places a limit on the number of files in a directory, MySQL is bound by that constraint. The efficiency of the operating system in handling large numbers of files in a directory can place a practical limit on the number of tables in a database. If the time required to open a

file in the directory increases significantly as the number of files increases, database performance can be adversely affected.

The amount of available disk space limits the number of tables.

MySQL 3.22 had a 4GB (4 gigabyte) limit on table size. With the MyISAM storage engine in MySQL 3.23, the maximum table size was increased to 65536 terabytes (2567 – 1 bytes). With this larger allowed table size, the maximum effective table size for MySQL databases is usually determined by operating system constraints on file sizes, not by MySQL internal limits.

The InnoDB storage engine maintains InnoDB tables within a tablespace that can be created from several files. This allows a table to exceed the maximum individual file size. The tablespace can include raw disk partitions, which allows extremely large tables. The maximum tablespace size is 64TB.

The following table lists some examples of operating system file-size limits. This is only a rough guide and is not intended to be definitive. For the most up-to-date information, be sure to check the documentation specific to your operating system.

Operating System File-size Limit

Linux 2.2-Intel 32-bit 2GB (LFS: 4GB)

Linux 2.4+ (using ext3 filesystem) 4TB

Solaris 9/10 16TB

NetWare w/NSS filesystem 8TB

Win32 w/ FAT/FAT32 2GB/4GB

Win32 w/ NTFS 2TB (possibly larger)

MacOS X w/ HFS+ 2TB

Explain normalization concept?

The normalization process involves getting our data to conform to three progressive normal forms, and a higher level of normalization cannot be achieved until the previous levels have been achieved (there are actually five normal forms, but the last two are mainly academic and will not be discussed).

First Normal Form

The First Normal Form (or 1NF) involves removal of redundant data from horizontal rows. We want to ensure that there is no duplication of data in a given row, and that every column stores the least amount of information possible (making the field atomic).

Second Normal Form

Where the First Normal Form deals with redundancy of data across a horizontal row, Second Normal Form (or 2NF) deals with redundancy of data in vertical columns. As stated earlier, the normal forms are progressive, so to achieve Second Normal Form, your tables must already be in First Normal Form.

Third Normal Form

I have a confession to make; I do not often use Third Normal Form. In Third Normal Form we are looking for data in our tables that is not fully dependant on the primary key, but dependant on another value in the table

What's the difference between accessing a class method via -> and via ::?

:: is allowed to access methods that can perform static operations, i.e. those, which do not require object initialization.

What are the advantages and disadvantages of CASCADE STYLE SHEETS?

External Style Sheets
Advantages
Can control styles for multiple documents at once Classes can be created for use on multiple HTML element types in many documents Selector and grouping methods can be used to apply styles under complex contexts

Disadvantages
An extra download is required to import style information for each document The rendering of the document may be delayed until the external style sheet is loaded Becomes slightly unwieldy for small quantities of style definitions

Embedded Style Sheets
Advantages
Classes can be created for use on multiple tag types in the document Selector and grouping methods can be used to apply styles under complex contexts No additional downloads necessary to receive style information

Disadvantage
This method can not control styles for multiple documents at once

Inline Styles
Advantages
Useful for small quantities of style definitions Can override other style specification methods at the local level so only exceptions need to be listed in conjunction with other style methods

Disadvantages
Does not distance style information from content (a main goal of SGML/HTML) Can not control styles for multiple documents at once Author can not create or control classes of elements to control multiple element types within the document Selector grouping methods can not be used to create complex element addressing scenarios

What type of inheritance that php supports?
In PHP an extended class is always dependent on a single base class, that is, multiple inheritance is not supported. Classes are extended using the keyword 'extends'.

How can increase the performance of MySQL select query?
We can use LIMIT to stop MySql for further search in table after we have received our required no. of records, also we can use LEFT JOIN or RIGHT JOIN instead of full join in cases we have related data in two or more tables.

How can we change the name of a column of a table?
MySQL query to rename table: RENAME TABLE tbl_name TO new_tbl_name
or,
ALTER TABLE tableName CHANGE OldName newName.

When you want to show some part of a text displayed on an HTML page in red font color? What different possibilities are there to do this? What are the advantages/disadvantages of these methods?

There are 2 ways to show some part of a text in red:

1. Using HTML tag <font color="red">
2. Using HTML tag <span style="color: red">

When viewing an HTML page in a Browser, the Browser often keeps this page in its cache. What can be possible advantages/disadvantages of page caching? How can you prevent caching of a certain page (please give several alternate solutions)?

When you use the metatag in the header section at the beginning of an HTML Web page, the Web page may still be cached in the Temporary Internet Files folder.

A page that Internet Explorer is browsing is not cached until half of the 64 KB buffer is filled. Usually, metatags are inserted in the header section of an HTML document, which appears at the beginning of the document. When the HTML code is parsed, it is read from top to bottom. When the metatag is read, Internet Explorer looks for the existence of the page in cache at that exact moment. If it is there, it is removed. To properly prevent the Web page from appearing in the cache, place another header section at the end of the HTML document.

What are the different ways to login to a remote server? Explain the means, advantages and disadvantages?

There is at least 3 ways to logon to a remote server:
Use ssh or telnet if you concern with security
You can also use rlogin to logon to a remote server.

Please give a regular expression (preferably Perl/PREG style), which can be used to identify the URL from within a HTML link tag.

Try this: /href="([^"]*)"/i

How can I use the COM components in php?

The COM class provides a framework to integrate (D)COM components into your PHP scripts.
string COM::COM(string module_name [, string server_name [, int codepage]]) - COM class constructor.

Parameters:

module_name: name or class-id of the requested component.
server_name: name of the DCOM server from which the component should be fetched. If NULL, localhost is assumed. To allow DCOM com, allow_dcom has to be set to TRUE in php.ini.
codepage - specifies the codepage that is used to convert php-strings to unicode-strings and vice versa. Possible values are CP_ACP, CP_MACCP, CP_OEMCP, CP_SYMBOL, CP_THREAD_ACP, CP_UTF7 and CP_UTF8.
Usage:
$word->Visible = 1; //open an empty document
$word->Documents->Add(); //do some weird stuff
$word->Selection->TypeText("This is a test…");
$word->Documents[1]->SaveAs("Useless test.doc"); //closing word
$word->Quit(); //free the object
$word->Release();

$word = null;

How many ways we can give the output to a browser?
HTML output
PHP, ASP, JSP, Servlet Function
Script Language output Function
Different Type of embedded Package to output to a browser

What is the default session time in php and how can I change it?
The default session time in php is until closing of browser

What changes I have to do in php.ini file for file uploading?
Make the following line uncomment like:
; Whether to allow HTTP file uploads.
file_uploads = On
; Temporary directory for HTTP uploaded files (will use system default if not
; specified).
upload_tmp_dir = C:\apache2triad\temp
; Maximum allowed size for uploaded files.
upload_max_filesize = 2M

How can I set a cron and how can I execute it in Unix, Linux, and windows?
Cron is very simply a Linux module that allows you to run commands at predetermined times or intervals. In Windows, it's called Scheduled Tasks. The name Cron is in fact derived from the same word from which we get the word chronology, which means order of time.
The easiest way to use crontab is via the crontab command.

crontab

This command 'edits' the crontab. Upon employing this command, you will be able to enter the commands that you wish to run. My version of
Linux uses the text editor vi. You can find information on using vi here.

The syntax of this file is very important – if you get it wrong, your crontab will not function properly. The syntax of the file should be as follows:
minutes hours day_of_month month day_of_week command

All the variables, with the exception of the command itself, are numerical constants. In addition to an asterisk (*), which is a wildcard that allows any value, the ranges permitted for each field are as follows:

Minutes: 0-59
Hours: 0-23
Day_of_month: 1-31
Month: 1-12
Weekday: 0-6

We can also include multiple values for each entry, simply by separating each value with a comma.

command can be any shell command and, as we will see momentarily, can also be used to execute a Web document such as a PHP file.

So, if we want to run a script every Tuesday morning at 8:15 AM, our mycronjob file will contain the following content on a single line:

15 8 * * 2 /path/to/scriptname

This all seems simple enough, right? Not so fast! If you try to run a PHP script in this manner, nothing will happen (barring very special configurations that have PHP compiled as an executable, as opposed to an Apache module). The reason is that, in order for PHP to be parsed, it needs to be passed through Apache. In other words, the page needs to be called via a browser or other means of retrieving

Web content. For our purposes, I'll assume that your server configuration includes wget, as is the case with most default configurations. To test your configuration, log in to shell. If you're using an RPM-based system (e.g. Redhat or Mandrake), type the following:

wget help

If you are greeted with a wget package identification, it is installed in your system.
You could execute the PHP by invoking wget on the URL to the page, like so:

wget http://www.example.com/file.php

Now, let's go back to the mailstock.php file we created in the first part of this article. We saved it in our document root, so it should be accessible via the Internet. Remember that we wanted it to run at 4PM Eastern time, and send you your precious closing bell report? Since I'm located in the Eastern timezone, we can go ahead and set up our crontab to use 4:00, but if you live elsewhere, you might have to compensate for the time difference when setting this value.
This is what my crontab will look like:

0 4 * * 1,2,3,4,5 we get http://www.example.com/mailstock.php

Steps for the payment gateway processing?
An online payment gateway is the interface between your merchant account and your Web site. The online payment gateway allows you to immediately verify credit card transactions and authorize funds on a customer's credit card directly from your Web site. It then passes the transaction off to your merchant bank for processing, commonly referred to as transaction batching

How many ways I can redirect a PHP page?
Here are the possible ways of php page redirection.

1. Using Java script:
'; echo 'window.location.href="'.$filename.'"';'; echo ''; echo ''; echo ''; echo ''; } }
redirect('http://maosjb.com'); ?>

2. Using php function: header("Location:http://maosjb.com ");

List out different arguments in PHP header function?

void header (string string [, bool replace [, int http_response_code]])

What type of headers have to be added in the mail function to attach a file?
$boundary = '--' . md5(uniqid (rand()));
$headers = "From: \"Me\"\n";
$headers .= "MIME-Version: 1.0\n";
$headers .= "Content-Type: multipart/mixed; boundary=\"$boundary\"";

What is the difference between Reply-to and Return-path in the headers of a mail function?
Reply-to: Reply-to is where to delivery the reply of the mail.

Return-path: Return path is when there is a mail delivery failure occurs then where to delivery the failure notification.

How to store the uploaded file to the final location?
move_uploaded_file (string filename, string destination)

This function checks to ensure that the file designated by filename is a valid upload file (meaning that it was uploaded via PHP's HTTP POST upload mechanism). If the file is valid, it will be moved to the filename given by destination.

If filename is not a valid upload file, then no action will occur, and move_uploaded_file() will return FALSE.

If filename is a valid upload file, but cannot be moved for some reason, no action will occur, and move_uploaded_file() will return FALSE. Additionally, a warning will be issued.

Explain about Type Juggling in php?
PHP does not require (or support) explicit type definition in variable declaration; a variable's type is determined by the context in which that variable is used. That is to say, if you assign a string value to variable $var, $var becomes a string. If you then assign an integer value to $var, it becomes an integer.

An example of PHP's automatic type conversion is the addition operator '+'. If any of the operands is a float, then all operands are evaluated as floats, and the result will be a float. Otherwise, the operands will be interpreted as integers, and the result will also be an integer. Note that this does NOT change the types of the operands themselves; the only change is in how the operands are evaluated.

$foo += 2; // $foo is now an integer (2)
$foo = $foo + 1.3; // $foo is now a float (3.3)
$foo = 5 + "10 Little Piggies"; // $foo is integer (15)
$foo = 5 + "10 Small Pigs"; // $foo is integer (15)

If the last two examples above seem odd, see String conversion to numbers.
If you wish to change the type of a variable, see settype().
If you would like to test any of the examples in this section, you can use the var_dump() function.
Note: The behavior of an automatic conversion to array is currently undefined.

Since PHP (for historical reasons) supports indexing into strings via offsets using the same syntax as

array indexing, the example above leads to a problem: should $a become an array with its first element being "f", or should "f" become the first character of the string $a? The current versions of PHP interpret the second assignment as a string offset identification, so $a becomes "f", the result of this automatic conversion however should be considered undefined. PHP 4 introduced the new curly bracket syntax to access characters in string, use this syntax instead of the one presented above:

How can I embed a java programme in php file and what changes have to be done in php.ini file?

There are two possible ways to bridge PHP and Java: you can either integrate PHP into a Java Servlet environment, which is the more stable and efficient solution, or integrate Java support into PHP. The former is provided by a SAPI module that interfaces with the Servlet server, the latter by this Java extension.
The Java extension provides a simple and effective means for creating and invoking methods on Java objects from PHP. The JVM is created using JNI, and everything runs in-process.

Example Code:

getProperty('java.version') . "; echo 'Java vendor=' . $system->getProperty('java.vendor') . "; echo 'OS=' . $system->getProperty('os.name') . ' ' . $system->getProperty('os.version') . ' on ' . $system->getProperty('os.arch') . ' '; // java.util.Date example $formatter = new Java('java.text.SimpleDateFormat', "EEEE, MMMM dd, yyyy 'at' h:mm:ss a zzzz"); echo $formatter->format(new Java('java.util.Date')); ?>

The behaviour of these functions is affected by settings in php.ini.
Table 1. Java configuration options
Name
Default
Changeable
java.class.path
NULL
PHP_INI_ALL
Name Default Changeable
java.home
NULL
PHP_INI_ALL
java.library.path
NULL
PHP_INI_ALL
java.library
JAVALIB
PHP_INI_ALL

Explain the ternary conditional operator in PHP?
Expression preceding the ? is evaluated, if it's true, then the expression preceding the : is executed, otherwise, the expression following : is executed.

What's the difference between include and require?
It's how they handle failures. If the file is not found by require(), it will cause a fatal error and halt the

execution of the script. If the file is not found by include(), a warning will be issued, but execution will continue.

How many ways can we get the value of current session id?
session_id() returns the session id for the current session.