

1. **What does a special set of tags <?= and ?> do in PHP?** -
The output is displayed directly to the browser.
2. **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.
3. **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.
4. **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.
5. **How do you define a constant?** - Via define() directive, like define("MYCONSTANT", 100);
6. **How do you pass a variable by value?** - Just like in C++, put an ampersand in front of it, like \$a = &\$b
7. **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.
8. **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.
9. **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.
10. **How do I find out the number of parameters passed into function?** -
func_num_args() function returns the number of parameters passed in.
11. **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.
12. **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.

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

14.How do you call a constructor for a parent class? - parent::constructor(\$value)

15.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.

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

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

17.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.

18.How come the code <?php print "Contents: \$arr[1]"; ?> works, but <?php print "Contents: \$arr[1][2]"; ?> 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.

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

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

21.I want to combine two variables together:

```
$var1 = 'Welcome to ';  
$var2 = 'TechInterviews.com';
```

What will work faster? Code sample 1:

```
$var 3 = $var1.$var2;
```

Or code sample 2:

```
$var3 = "$var1$var2";
```

Both examples would provide the same result - \$var3 equal to "Welcome to TechInterviews.com". However, Code Sample 1 will work significantly faster. Try it out with large sets of data (or via concatenating small sets a million times or so),

and you will see that concatenation works significantly faster than variable substitution.

22. **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', ' ', 'TechInterviews!'; ?>
```

and it will output the string "Welcome to TechInterviews!" **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**.

23. **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\(\)](#).

24. **What's the output of the [ucwords](#) function in this example?**

```
$formatted = ucwords("TECHINTERVIEWS IS COLLECTION OF INTERVIEW  
QUESTIONS");  
print $formatted;
```

What will be printed is TECHINTERVIEWS 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.

25. **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.

26. **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.

27. 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.

1. What is the difference between \$name and \$\$name?

\$name is variable where as \$\$name is reference variable like \$name=sonia and \$ \$name=singh so \$sonia value is singh.

```
$name = 'sonia';  
$$name = 'singh';
```

```
echo "Name:" . $name . "\n";  
echo $sonia;
```

Output:

```
Name:sonia  
singh
```

2. How many ways we can pass the variable through the navigation between the pages?

Register the variable into the session

Pass the variable as a cookie

Pass the variable as part of the URL

3. How can we create a database using php?

```
mysql_create_db();
```

4. 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.

5. What are encryption functions in PHP?

```
CRYPT(), MD5()
```

6. How to store the uploaded file to the final location?

```
move_uploaded_file( string filename, string destination)
```

7. Explain mysql_error().

The `mysql_error()` message will tell us what was wrong with our query, similar to the message we would receive at the MySQL console.

8. List out the predefined classes in PHP?

Directory

stdClass

__PHP_Incomplete_Class

Exception

php_user_filter

9. How can we encrypt the username and password using php?

You can encrypt a password with the following `mysql_set_password()`

```
PASSWORD=PASSWORD("Password");
```

We can encode data using `base64_encode($string)` and can decode using `base64_decode($string)`;

10. What is the difference between explode and split?

Split function splits string into array by regular expression. Explode splits a string into array by string.

For Example: `explode(" and", "India and Pakistan and Srilanka");`

`split(" :", "India : Pakistan : Srilanka");`

Both of these functions will return an array that contains India, Pakistan, and Srilanka.

11. How do you define a constant?

Constants in PHP are defined using `define()` directive, like `define("MYCONSTANT", 100);`

12. How do you pass a variable by value in PHP?

Just like in C++, put an ampersand in front of it, like `$a = &$b;`

```
$a = 'TestA';
```

```
$b = &$a;
```

```
echo $a."\n";
```

```
echo $b;
```

Output:

```
TestA
```

```
TestA
```

13. How do you call a constructor for a parent class?

```
parent::__construct($value)
```

14. What is the difference between PHP and JavaScript?

JavaScript is a client side scripting language, so JavaScript can make popups and other things happen on someone's PC. While PHP is server side scripting language so it does

every stuff with the server.

15. What is the difference between the functions unlink and unset?

unlink() deletes the given file from the file system.

unset() makes a variable undefined.

16. What are default session time and path?

default session time in PHP is 1440 seconds or 24 minutes

Default session save path is temporary folder /tmp

17. for image work which library?

we will need to compile PHP with the GD library of image functions for this to work. GD and PHP may also require other libraries, depending on which image formats you want to work with.

18. How can we get second of the current time using date function?

```
<?php
$second = date("s");
?>
```

19. What are the Formatting and Printing Strings available in PHP?

printf()- Displays a formatted string
sprintf()-Saves a formatted string in a variable
fprintf() -Prints a formatted string to a file
number_format()-Formats numbers as strings

20. How can we find the number of rows in a result set using PHP?

```
$result = mysql_query($sql, $db_link);
$num_rows = mysql_num_rows($result);
echo "$num_rows rows found";
```

21. what is function overloading

Function overloading is a feature of C++ that allows us to create multiple functions with the same name, so long as they have different parameters. Consider the following function:

```
int Add(int nX, int nY)
{
    return nX + nY;
}
```

22.What is function overloading and operator overloading?

Function overloading: C++ enables several functions of the same name to be defined, as long as these functions have different sets of parameters (at least as far as their types are concerned). This capability is called function overloading. When an overloaded function is called, the C++ compiler selects the proper function by examining the number, types and order of the arguments in the call. Function overloading is commonly used to create several functions of the same name that perform similar tasks but on different data types. Operator overloading allows existing C++ operators to be redefined so that they work on objects of user-defined classes. Overloaded operators are syntactic sugar for equivalent function calls. They form a pleasant facade that doesn't add anything fundamental to the language (but they can improve understandability and reduce maintenance costs).

23.what is friend function?

A friend function for a class is used in object-oriented programming to allow access to public, private, or protected data in the class from the outside.

Normally, a function that is not a member of a class cannot access such information; neither can an external class. Occasionally, such access will be advantageous for the programmer. Under these circumstances, the function or external class can be declared as a friend of the class using the friend keyword.

Use of friend function:

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.

24. What are the current versions of apache, PHP, and MySQL?

latest version of bootstrap : Bootstrap CSS 3.3.6

Latest release of PHP:

Latest stable version of PHP :5.6.25 Released: 18 Aug 2016

Latest version of MYSQL : 5.7

25. Suppose your Zend engine supports the mode <? ?>. Then how can you configure your PHP Zend engine to support <?php ?>mode ?

Answer : In php.ini file:

set

short_open_tag=on

to make PHP support

26. How can we convert asp pages to PHP pages?

Answer : There are lots of tools available for asp to PHP conversion. you can search Google for that. the best one is available at <http://asp2php.naken.cc/>

26 .How can we convert the time zones using PHP?

Answer : By using date_default_timezone_get and date_default_timezone_set function on PHP 5.1.0

<!--p// Discover what 8am in Tokyo relates to on the East Coast of the US

// Set the default timezone to Tokyo time:

date_default_timezone_set('Asia/Tokyo');

// Now generate the timestamp for that particular timezone, on Jan 1st, 2000

\$stamp = mktime(8, 0, 0, 1, 1, 2000);

// Now set the timezone back to US/Eastern

date_default_timezone_set('US/Eastern');

// Output the date in a standard format (RFC1123), this will print:

// Fri, 31 Dec 1999 18:00:00 EST

echo '

', date(DATE_RFC1123, \$stamp) ,'

;' ?>

27. What is meant by urlencode and urldecode?

Answer : URLEncode returns a string in which all non-alphanumeric characters except -_. have been replaced with a percent (%) sign followed by two hex digits and spaces

encoded as plus (+) signs. It is encoded the same way that the posted data from a WWW form

is encoded, that is the same way as in application/x-www-form-urlencoded media type. urlencode decodes any %## encoding in the given string.

28. What is the maximum size of a file that can be uploaded using PHP and how can we change this?

Answer : By default the maximum size is 2MB. and we can change the following setup at php.ini upload_max_filesize = 2M

29 .Question : How can we increase the execution time of a PHP script?

Answer : by changing the following setup at php.ini max_execution_time = 30; Maximum execution time of each script, in seconds

30 .Who is the father of PHP and explain the changes in PHP versions?

Answer : Rasmus Lerdorf is known as the father of PHP.PHP/FI 2.0 is an early and no longer supported version of PHP. PHP 3 is the successor to PHP/FI 2.0 and is a lot nicer. PHP 4 is the current generation of PHP, which uses the Zend engine under the hood. PHP 5 uses Zend engine 2 which, among other things, offers many additional OOPs features.

31. In how many ways we can retrieve the data in the result set of MySQL using PHP?

Answer : You can do it by 4 Ways

1. mysql_fetch_row.
2. mysql_fetch_array
3. mysql_fetch_object
4. mysql_fetch_assoc

32. What is the difference between mysql_fetch_object and mysql_fetch_array?

Answer : **mysql_fetch_object()** is similar to **mysql_fetch_array()**, with one difference – an object is returned, instead of an array. Indirectly, that means that you can only access the data by the field names, and not by their offsets (numbers are illegal property names).

33. How can we extract string 'hotmail.com ' from a string raghav.cool@hotmail.com using regular expression of PHP?

Answer : preg_match("/^http://.+@(.+)\$/", 'raghav.cool@hotmail.com', \$found);

```
echo $found[1];
```

34. How can I execute a PHP script using command line?

Answer : As of version 4.3.0, PHP supports a new SAPI type (Server Application Programming Interface) named CLI which means Command Line Interface. 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.

35. What is meant by nl2br()?

Answer : Inserts HTML line breaks

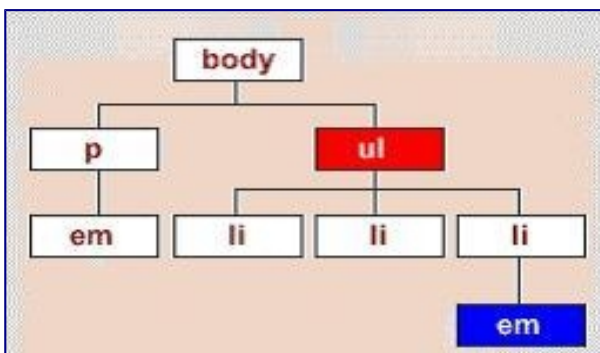
(
)

before all newlines in a string string nl2br (string); Returns string with ” inserted before all newlines.

For example: echo nl2br(“god bless/n you”) will output “god bless
you” to your browser.

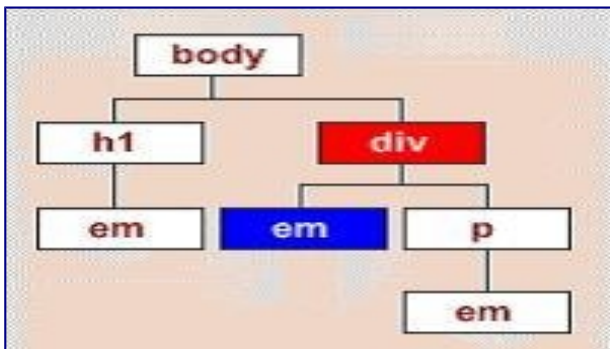
36. Draw the architecture of Zend engine?

Answer : The Zend Engine is the **internal compiler and runtime engine** used by PHP4. Developed by Zeev Suraski and Andi Gutmans, the Zend Engine is an abbreviation of their names. In the early days of PHP4, it worked as follows:



The PHP script was loaded by the Zend Engine and compiled into Zend opcode. Opcodes, short for operation codes, are low level binary instructions. Then the opcode was executed

and the HTML generated sent to the client. The opcode was flushed from memory after execution. Today, there are a multitude of products and techniques to help you speed up this process. In the following diagram, we show how modern PHP scripts work; all the shaded boxes are optional.



PHP Scripts are loaded into memory and compiled into Zend opcodes.

37. How to secure cookies?

```
setcookie(name,value,expire,path,domain,secure,httponly);
```

secure Optional. Specifies whether or not the cookie should only be transmitted over a secure HTTPS connection. TRUE indicates that the cookie will only be set if a secure connection exists. Default is FALSE

httponly Optional. If set to TRUE the cookie will be accessible only through the HTTP protocol (the cookie will not be accessible by scripting languages). This setting can help to reduce identity theft through XSS attacks. Default is FALSE

38 .What are the features and advantages of object-oriented programming?

Answer : 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.

39 . What are the differences between procedure-oriented languages and object-oriented languages?

Answer : Traditional programming has the following characteristics: Functions are written sequentially, so that a change in programming can affect any code that follows it. If a function is used multiple times in a system (i.e., a piece of code that manages the date), it is often simply cut and pasted into each program (i.e., a change log, order function, fulfillment system, etc). If a date change is needed (i.e., Y2K when the code needed to be changed to handle four numerical digits instead of two), all these pieces of code must be found, modified, and tested. Code (sequences of computer instructions) and data (information on which the instructions operates on) are kept separate. Multiple sets of code can access and modify one set of data. One set of code may rely on data in multiple places. Multiple sets of code and data are required to work together. Changes made to any of the code sets and data sets can cause problems through out the system. Object-Oriented programming takes a radically different approach: Code and data are merged into one indivisible item – an object (the term “component” has also been used to describe an object.) An object is an abstraction of a set of real-world things (for example, an object may be created around “date”) The object would contain all information and functionality for that thing (A date object it may contain labels like January, February, Tuesday, Wednesday.

It may contain functionality that manages leap years, determines if it is a business day or a holiday, etc., See Fig. 1). Ideally, information about a particular thing should reside in only one place in a system. The information within an object is encapsulated (or hidden) from the rest of the system. A system is composed of multiple objects (i.e., date function, reports, order processing, etc., See Fig 2). When one object needs information from another object, a request is sent asking for specific information. (for example, a report object may need to know what today’s date is and will send a request to the date object) These requests are called messages and each object has an interface that manages messages. OO programming languages include features such as “class”, “instance”, “inheritance”, and “polymorphism” that increase the power and flexibility of an object.

40 . What are the differences between PHP 3 and PHP 4 and PHP 5?

Answer : PHP 3 is most procedure oriented and , PHP4 and PHP5 aer object oriented.
For more details

41. What is the functionality of the function htmlentities?

Answer : 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.

42. How can we get the properties (size, type, width, height) of an image using PHP image functions?

Answer : To know the Image type use exif_imagetype () function

To know the Image size use getimagesize () function

To know the image width use imagesx () function

To know the image height use imagesy() function

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

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

44. What are the different functions in sorting an array?

Answer : Sort(), arsort(),

asort(), ksort(),

natsort(), natcasesort(),

rsort(), usort(),

array_multisort(), and

uksort().

45. How can we know the count/number of elements of an array?

Answer : 2 ways

a) sizeof(\$urarray) This function is an alias of count()

b) count(\$urarray)

46. Question : What is the PHP predefined variable that tells the What types of images that PHP supports?

Answer : Though i am not sure if this is wrong or not, With the exif extension you are able to work with image meta data.

47. How can I make a script that can be bi-language (supports English, German)?

Answer : You can maintain two separate language file for each of the language. All the labels are putted in both language files as variables and assign those variables in the PHP source. On run-time choose the required language option.

48. How many ways we can we find the current date using MySQL?

Answer :

```
SELECT CURDATE();  
CURRENT_DATE() = CURDATE()  
for time use SELECT CURTIME();  
CURRENT_TIME() = CURTIME()
```

49. What type of inheritance that PHP supports?

Answer : In PHP an extended class is always dependent on a single base class, that is, multiple inheritance is supported by interfaces. Classes are extended using the keyword 'extends'.

50. What is the functionality of md5 function in PHP?

Answer : Calculate the md5 hash of a string. The hash is a 32-character hexadecimal number. I use it to generate keys which I use to identify users etc. If I add random no techniques to it the md5 generated now will be totally different for the same string I am using.

51. How can I load data from a text file into a table?

Answer : you can use LOAD DATA INFILE file_name; syntax to load data from a text file. but you have to make sure that a) data is delimited b) columns and data matched correctly.

52. How can we know the number of days between two given dates using MySQL?

Answer : SELECT DATEDIFF('2007-03-07?', '2005-01-01?');

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

```
Answer : $date1 = date('Y-m-d');  
$date2 = '2006-08-15?';  
$days = (strtotime($date1) - strtotime($date2)) / (60 * 60 * 24);
```

53. Setting async to false means that the statement you are calling has to complete

before the next statement in your function can be called. If you set `async: true` then that statement will begin its execution and the next statement will be called regardless of whether the `async` statement has completed yet.

`Async:False` = Codes **paused**. (Other codes are **waiting** for this..)

`Async:True` = Codes **run parallel**. Nothing gets paused.

What is ajax synchronous and asynchronous?

Synchronous – Script stops and waits for the server to send back a reply before continuing. There are some situations where Synchronous Ajax is mandatory.

In standard Web applications, the interaction between the customer and the server is synchronous. This means that one has to happen after the other. If a customer clicks a link, the request is sent to the server, which then sends the results back.

Because of the danger of a request getting lost and hanging the browser, synchronous javascript isn't recommended for anything outside of (onbefore)unload event handlers, but if you need to hear back from the server before you can allow the user to navigate away from the page, synchronous Javascript isn't just your best option.

54 .What is difference between UNION and Union ALL?

The **UNION ALL** command is equal to the **UNION** command, except that **UNION ALL** selects **all** values. **The difference between Union and Union all** is that **Union all** will not eliminate duplicate rows, instead it just pulls **all** rows from **all** tables fitting your query specifics and combines them into a table.

UNION removes duplicate records (where all columns in the results are the same), UNION ALL does not.

UNION Example:

```
SELECT 'foo' AS bar UNION SELECT 'foo' AS bar
```

Result:

```
+-----+
| bar |
+-----+
| foo |
+-----+
1 row in set (0.00 sec)
```

UNION ALL example:

```
SELECT 'foo' AS bar UNION ALL SELECT 'foo' AS bar
```

Result:

```
+-----+
| bar |
+-----+
| foo |
| foo |
+-----+
2 rows in set (0.00 sec)
```

UNION performs a DISTINCT on the result set, eliminating any duplicate rows.

UNION ALL does not remove duplicates, and it therefore faster than UNION.

55. what is difference between where and having in sql

The **HAVING** clause was added to **SQL** because the WHERE keyword could not be used with aggregate functions. ... **The difference between** the two is in the relationship to the GROUP BY clause: WHERE comes before GROUP BY; **SQL** evaluates the WHERE clause before it groups records

emp_bonus

emp_bonus	
Employee	Bonus
A	1000
B	2000
A	500
C	700
B	1250

Employee	Sum(Bonus)
A	1500
B	3250
C	700

```
select employee, sum(bonus) from emp_bonus
```


group by employee having sum(bonus) > 1000;

So we can see that the difference between the having and where clause in sql is that the where clause can *not* be used with aggregates, but the having clause can. One way to think of it is that the having clause is an additional filter to the where clause.

1) Apart from SELECT queries, you can use WHERE clause with UPDATE and DELETE clause but HAVING clause can only be used with SELECT query.

2) WHERE clause is used for filtering rows and it applies on each and every row, while HAVING clause is used to filter groups in SQL.

3) One syntax level **difference between WHERE and HAVING clause** is that, former is used before GROUP BY clause, while later is used after GROUP BY clause.

4) When WHERE and HAVING clause are used together in a SELECT query with aggregate function, WHERE clause is applied first on individual rows and only rows which pass the condition is included for creating groups. Once group is created, HAVING clause is used to filter groups based upon condition specified.

Scope Resolution Operator (::)_

The Scope Resolution Operator (also called Paamayim Nekudotayim) or in simpler terms, the double colon, is a token that allows access to [static](#), [constant](#), and overridden properties or methods of a class

56. What is difference between MYISAM and InnoDB?

InnoDB also implements transactions, foreign keys and relationship constraints while **MyISAM** does not. ... **InnoDB** has row-level locking, **MyISAM** can only do full table-level locking. **InnoDB** has better crash recovery. **MyISAM** has FULLTEXT search indexes, **InnoDB** did not until **MySQL** 5.6 (Feb 2013)

MYISAM:

1. MYISAM supports Table-level Locking
2. MyISAM designed for need of speed
3. MyISAM does not support foreign keys hence we call MySQL with MYISAM is DBMS
4. MyISAM stores its tables, data and indexes in disk space using separate three different files. (tablename.FRM, tablename.MYD, tablename.MYI)
5. MYISAM not supports transaction. You cannot commit and rollback with MYISAM. Once you issue a command it's done.
6. MYISAM supports fulltext search
7. You can use MyISAM, if the table is more static with lots of select and less update and delete.

INNODB:

1. InnoDB supports Row-level Locking
2. InnoDB designed for maximum performance when processing high volume of data
3. InnoDB support foreign keys hence we call MySQL with InnoDB is RDBMS

4. InnoDB stores its tables and indexes in a tablespace
5. InnoDB supports transaction. You can commit and rollback with InnoDB

57. What is main difference between session and cookies in php?

The **main difference between a session** and a **cookie** is that **session** data is stored on the server, whereas **cookies** store data in the visitor's browser. **Sessions** are more secure than **cookies** as it is stored in server. **Cookie** can be turn off from browse

1 Sessions are **server-side** files that contain user information

Session Max life time is 1440 Seconds(24 Minutes) as defined in php.ini file

in php.ini on line 1604 you can find

2
; http://php.net/session.gc-maxlifetime
session.gc_maxlifetime = 1440

You can edit this value if you need custom session life.

3 In php **\$_SESSION** super global variable is used to manage session.

Before using **\$_SESSION**, you have to write **session_start()**;

4 In that way session will start and you can access **\$_SESSION** variable on that page.

You can store as much data as you like within in sessions. The only limits you can reach is the maximum memory a script can consume at one time, which by default is 128MB.

5 php.ini line 479

; http://php.net/memory-limit
memory_limit = 128M

Session is dependent on COOKIE.

Because when you start session with **session_start()** then **SESSIONID** named key will be set in **COOKIE** with

6 Unique Identifier Value for your system.

So that when you communicate with server next time then with this saved **SESSIONID**, Server will identify **who you are?**

7 **session_destroy()**; is used to "**Destroys all data registered to a session**", and if you want to unset some key's of **SESSION** then use **unset()** function.

Cookies are **client-side** files that contain

We have to set cookie max life time man

```
setcookie("email", 'test@example.com',  
time()+3600); /* expire in 1 hour */
```

In above example

Cookie Name : email

Cookie Value : test@example.com

Expire time : 1 hour after current time (1

In php **\$_COOKIE** super global variable

You don't need to start Cookie as It is sto

Official MAX Cookie size is 4KB

There is no function named **unsetcookie**

Although if you need to delete cookie the
so that cookie will automatically disabled

```
unset($_SESSION["key1"], $_SESSION["key2"])
```

```
setcookie('email', 'test@example.com', t
```

8 Session ends when user close his browser.

In that way you unset cookie(Set cookie
Cookie ends depends on the life time yo

58. Difference between GET and POST:

Parameters remain in browser history because they are part of the URL

- Can be bookmarked.
- GET method should not be used when sending passwords or other sensitive information.
- 7607 character maximum size.
- Url example: page2.php?category=sport

POST:

- Parameters are not saved in browser history.
- Can not be bookmarked.
- POST method used when sending passwords or other sensitive information.
- 8 Mb max size for the POST method.
- Url example: page2.php

59. Core Predefined Constants

- `PHP_VERSION` ([string](#))
 - The current PHP version as a string in "major.minor.release[extra]" notation.
- `PHP_MAJOR_VERSION` ([integer](#))
 - The current PHP "major" version as an integer (e.g., `int(5)` from version "5.2.7-extra"). Available since PHP 5.2.7.
- `PHP_MINOR_VERSION` ([integer](#))
 - The current PHP "minor" version as an integer (e.g., `int(2)` from version "5.2.7-extra"). Available since PHP 5.2.7.
- `PHP_RELEASE_VERSION` ([integer](#))
 - The current PHP "release" version as an integer (e.g., `int(7)` from version "5.2.7-extra"). Available since PHP 5.2.7.
- `PHP_VERSION_ID` ([integer](#))
 - The current PHP version as an integer, useful for version comparisons (e.g., `int(50207)` from version "5.2.7-extra"). Available since PHP 5.2.7.
- `PHP_EXTRA_VERSION` ([string](#))
 - The current PHP "extra" version as a string (e.g., '-extra' from version "5.2.7-extra"). Often used by distribution vendors to indicate a package version. Available since PHP 5.2.7.
- `PHP_ZTS` ([integer](#))
 - Available since PHP 5.2.7.
- `PHP_DEBUG` ([integer](#))
 - Available since PHP 5.2.7.
 -

- E_WARNING ([integer](#))
- E_PARSE ([integer](#))
- E_NOTICE ([integer](#))
- E_CORE_ERROR ([integer](#))
- E_CORE_WARNING ([integer](#))
- E_COMPILE_ERROR ([integer](#))
- E_COMPILE_WARNING ([integer](#))
- E_USER_ERROR ([integer](#))
- E_USER_WARNING ([integer](#))

60. Arrays::

Definition and Usage. The **array()** function is used to create an **array**. In **PHP**, there are three types of **arrays**: Indexed **arrays** - **Arrays** with numeric index. **Associative arrays** - **Arrays** with named keys.

An array is a data structure that stores one or more similar type of values in a single value. For example if you want to store 100 numbers then instead of defining 100 variables its easy to define an array of 100 length.

There are three different kind of arrays and each array value is accessed using an ID c which is called array index.

- **Numeric array** – An array with a numeric index. Values are stored and accessed in linear fashion.
- **Associative array** – An array with strings as index. This stores element values in association with key values rather than in a strict linear index order.

Multidimensional array – An array containing one or more arrays and values are accessed using multiple indices

Associative arrays are arrays that use named keys that you assign to them.

```
$capitals=array("India"=>"New Delhi","China"=>"Beijing","Pakistan"=>"Islamabad");
```

oops interface vs abstract class

Interface	Abstract class
Interface support multiple inheritance	Abstract class does not support multiple inheritance
Interface does'n Contains Data Member	Abstract class contains Data Member
Interface does'n contains Cunstructors	Abstract class contains Cunstructors
An interface Contains only incomplete member (signature of member)	An abstract class Contains both incomplete (abstract) and complete member
An interface cannot have access modifiers by default everything is assumed as public	An abstract class can contain access modifiers for the subs, functions, properties
Member of interface can not be Static	Only Complete Member of abstract class can be Static

61.

62. What is the difference between echo and print?

Main difference between echo() and print() is that echo is just an statement not a function and doesn't return's

value or it just prints a value whereas print() is an function which prints a value and also it returns value.

We cannot pass arguments to echo since it is just a statement whereas print is a function and we can pass

arguments to it and it returns true or false. print can be used as part of a more complex expression whereas

echo cannot. echo is marginally faster since it doesn't set a return value.

63. An examiner awards the highest mark 75 and the lowest mark 25, the pass marks being 40. The

moderator wants to change the highest mark to 250 and the lowest marks to 100 using the linear formula

$y=ax+b$. The revised pass marks will be:

A. 145

B. 150

C. 160

D. 400/3

Give the correct option.

$$y=ax+b$$

$$100=25a+b$$

$$250=75a+b$$

Solve it get a and b and then put

$$y=40a+b$$

Answer: 145

64. What's the difference between COPY OF A FILE & MOVE_UPLOAD_FILE in file uploading?

Move: 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.

Copy: Makes a copy of a file. Returns TRUE if the copy succeeded, FALSE otherwise.

65. How do you insert single & double quotes in MySQL db without using PHP?

& / "e;

Alternately, escape single quote using forward slash \'. In double quote you don't need to escape quotes.

Insert double quotes as "".

66. What do you need to do to improve the performance (speedy execution) for the script you have written?

If your script is to retrieve data from Database, you should use "Limit" syntax. Break down

the non dynamic

sections of website which need not be repeated over a period of time as include files.

67. How do you capture audio/video in PHP?

You need a module installed - FFMPEG. FFmpeg is a complete solution to record, convert and stream audio

and video. It includes libavcodec, the leading audio/video codec library. FFmpeg is developed under Linux,

but it can be compiled under most operating systems, including Windows.

68. How can we remove duplicate values from an array?

array_unique() function can be used for the purpose.

69. How do I find out whether a number is odd or even?

if (number%2==0) then even else odd.

70. How I can get IP address?

```
getenv("REMOTE_ADDR");
```

71. What is CAPTCHA?

CAPTCHA stands for Completely Automated Public Turing Test to tell Computers and Humans Apart. To

prevent spammers from using bots to automatically fill out forms, CAPTCHA programmers will generate an

image containing distorted images of a string of numbers and letters. Computers cannot determine what the

numbers and letters are from the image but humans have great pattern recognition abilities and will be able

to fairly accurately determine the string of numbers and letters. By entering the numbers and letters from the

image in the validation field, the application can be fairly assured that there is a human client using it.

72. SQL Injection_

Direct SQL Command Injection is a technique where an attacker creates or alters existing SQL commands to expose hidden data, or to override valuable ones, or even to execute dangerous system level commands on the database host. This is accomplished by the application taking user input and combining it with static parameters to build an SQL query. The following examples are based on true stories, unfortunately.

73. PHP 5 Date/Time Functions

Function	Description
strftime()	Formats a local time and/or date according to locale settings
strtotime()	Parses a time/date generated with strftime()
strtotime())	Parses an English textual datetime into a Unix timestamp
time()	Returns the current time as a Unix timestamp

74.

SOAP	REST
SOAP is a standard protocol for creating web services.	REST is an architectural style to create web services.
SOAP is acronym for Simple Object Access Protocol.	REST is acronym for REpresentational State Transfer.
SOAP uses WSDL to expose supported methods and technical details.	REST exposes methods through URIs, there are no technical details.
SOAP web services and client programs are bind with WSDL contract	REST doesn't have any contract defined between server and client
SOAP web services and client are tightly coupled with contract.	REST web services are loosely coupled.
SOAP learning curve is hard, requires us to learn about WSDL generation, client stubs creation etc.	REST learning curve is simple, POJO classes can be generated easily and works on simple HTTP methods.
SOAP supports XML data format only	REST supports any data type such as XML, JSON, image etc.
SOAP web services are hard to maintain, any change in WSDL contract requires us to create client stubs again and then make changes to client code.	REST web services are easy to maintain when compared to SOAP, a new method can be added without any change at client side for existing resources.
SOAP web services can be tested through programs or software such as Soap UI.	REST can be easily tested through CURL command, Browsers and extensions such as Chrome Postman.

75. What are the different errors in PHP?

There are 4 basically types of error.

Parse Error – Commonly caused due to syntax mistakes in codes e.g. missing semicolon, mismatch brackets.

Fatal Error – These are basically run time errors which are caused when you try to access what can't be done. E.g.

accessing a dead object, or trying to use a function that hasn't been declared.

Warning Error – These occurs when u try to include a file that is not present, or delete a file that is not on the server.

This will not halt the script; it will give the notice and continue with the next line of the script.

Notice Error - These errors occurs when u try to use a variable that hasn't been declared, this will not halt the script,

It will give the notice and continue with the next line of the script.

76. What is PDO classes.

The PHP Data Objects (PDO) extension defines a lightweight, consistent interface for accessing databases in PHP. It is

a data-access abstraction layer, so no matter what database we use the function to issue queries and fetch data will

be same. Using PDO drivers we can connect to database like DB2, Oracle, PostgreSQL etc.

77. Why do we use multipart/form-data in html form

This is the encoding used to send image or files via form, The data will be split into multiple parts and, one for each

files plus one for the text of the form body that may be sent with them.

78. How to run the interactive PHP shell from the command line interface?

Just use the PHP CLI program with the option -a as follows:1 php -a

79. What is PEAR in php?

PEAR(PHP Extension and Application Repository) is a framework and repository for reusable PHP

components. PEAR is a code repository containing all kinds of php code snippets and libraries.

PEAR also offers a command-line interface that can be used to automatically install "packages".

PEAR is a framework and distribution system for reusable PHP components. The project seeks to provide a structured library of code, maintain a system for distributing code and for

managing code packages, and promote a standard coding style. PEAR is broken into three classes: PEAR Core Components, PEAR Packages, and PECL Packages. The Core Components include the base classes of PEAR and PEAR_Error, along with database, HTTP, logging, and e-mailing functions. The PEAR Packages include functionality providing for authentication, networking, and file system features, as well as tools for working with XML and HTML templates.

80. What is MIME?

MIME - Multi-purpose Internet Mail Extensions.

MIME types represents a standard way of classifying file types over Internet.

Web servers and browsers have a list of MIME types, which facilitates files transfer of the same

type in the same way, irrespective of operating system they are working in.

A MIME type has two parts: a type and a subtype. They are separated by a slash (/).

MIME type for Microsoft Word files is application and the subtype is msword, i.e. application/msword.

81. What are the functions for IMAP?

IMAP is used for communicate with mail servers. It has a number of functions. Few of them are listed below:

1. Imap_alerts – Returns all the imap errors occurred
2. Imap_body – Reads the message body
3. Imap_check – Reads the current mail box
4. Imap_clearflag_full – Clears all flags
5. Imap_close – close and IMAP stream
6. Imap_delete – Delete message from current mailbox
7. Imap_delete_mailbox – Deletes a mailbox
8. Imap_fetchbody – Fetches body of message
9. Imap_fetchheader – Fetches header of message
10. Imap_headers – Returns headers for ALL messages
11. Imap_mail : send a mail
12. Imap_sort- Sorts imap messages

82. What is Type juggle in php?

Type Juggling means dealing with a variable type. In PHP a variables type is determined by the context in which it is used. If an integer value is assigned to a variable, it becomes an integer.

Example:

```
$var3= $var1 + $var2
```

Here, if \$var1 is an integer. \$var2 and \$var3 will also be treated as integers.

What is Type juggle in php?

In order to declare a variable in PHP, the type of the variable is not required. The data type is determined by the value / context of the variable. If integer value is assigned to the variable \$num, then the variable \$num is of the type integer. If string value is assigned to the variable \$str, the variable \$str is of the type string

83. What is Joomla in PHP?

Joomla is a content management system. Powerful online applications and web sites are build using Joomla. Joomla is an open source CMS tool. Clients can easily manage their web sites with minimal amount of instructions. It is highly extensible. Joomla runs off PHP or MySQL. Joomla is used to create, maintain a structured, flexible portal, add or edit content, changes the look and feel of the site. PHP scripting is used and persisted most of its data / information in MySQL database.

What is Joomla in PHP?

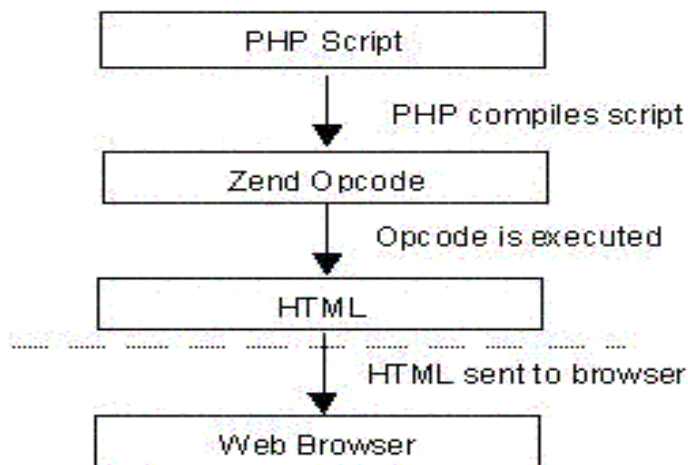
Joomla is an open source content management system. Joomla can be used in PHP as a framework to publish web contents. Joomla allows the user to manage the content of the web pages with ease.

84. What is zend engine?

Zend Engine is used internally by PHP as a compiler and runtime engine. PHP Scripts are loaded into memory and compiled into Zend opcodes.

Explain the architecture of Zend engine with the diagram.

Zend Engine is used internally by PHP as a compiler and runtime engine. PHP Scripts are loaded into memory and compiled into Zend opcodes. These opcodes are executed and the HTML generated is sent to the client. The same is depicted below



What is zend engine in PHP?

Zend engine is like a virtual machine and is an open source, and is known for its role in automating the web using PHP. Zend is named after its developers Zeev and Aandi. Its reliability, performance and extensibility has a significant role in increasing the PHP's popularity. The Zend Engine II is the heart of PHP 5. It is an open source project and freely available under BSD style license.

85. How can we know the number of days between two given dates using PHP?

The start date and end date can be first found as shown below:

```
$date1= strtotime($start_date);
```

```
$date2= strtotime($end_date);
```

```
$date_diff = (($date1)- ($date2)) / (60*60*24)
```

86. How do you create sub domains using PHP?

- Wild card domains can be used. Sub domains can be created by first creating a sub directory in the /htdocs folder. E.g. /htdocs/mydomain. Then, the host file needs to be modified to define the sub domain. If the sub domains are not configured explicitly, all

requests should be thrown to the main domain.

Following are the steps:

1. Set the main domain to act as a catch-all domain. Like if the main domain root is /home/admin/xyz.com/htdocs/ then the catch all setup sends all the sub-domain requests to the same directory i.e. /home/admin/xyz.com/htdocs/.

2. Add the following code at the top of the index page right after " "

```
$domain = $_SERVER['HTTP_HOST'];  
$domain_parts = explode('.', $domain);  
if (count($domain_parts) == 3 && $domain_parts[0] != "www")  
{  
    // make sure a subdomain is called  
    $user = $domain_parts[0];  
    $loc = "http://domain.tld/somepage.ext?varname=$user";  
    @header("Location:$loc");  
}
```

- By adding this code to the index file, the subdomain will be created.

87. How to upload files using PHP?

Files can be uploaded in PHP by using the tag type="file". An upload form must have enctype="multipart/form-data", method also needs to be set to method="post". Also, hidden input MAX_FILE_SIZE before the file input. To restrict the size of files.

Example:

```
<form enctype="multipart/form-data" action="sampleuplaod.php" method="POST">  
<input type="hidden" name="MAX_FILE_SIZE" value="1000" />
```

What is the difference between using copy() and move() function in php file uploading?

Copy() makes a copy of the file. It returns TRUE on success. It can copy from any source to destination. Move simple Moves the file to destination if the file is valid. While move can move the uploaded file from temp server location to any destination on the server. If filename is a valid upload file, but cannot be moved for some reason, no action will occur.

88. How to upload files using PHP?

- Select a file from the form using
- Specify the path into which the file is to be stored.
- Insert the following code in php script to upload the file.

```
move_uploaded_file($_FILES["file"]["tmp_name"], "myfolder/" . $_FILES["file"]["name"]);
```

89. What is the difference between Notify URL and Return URL?

Notify URL	Return URL
They are used in Paypal Payment Gateway integration.	They are used in Paypal Payment Gateway integration.
They are used to post information about the transaction.	They are used by the browser where the user needs to be redirected on completion of the payment process.
It has a maximum 256 characters length.	It is the page which is displayed upon the payment completion.
Eg: The payment gateway paypal.	Eg: A URL displayed on the site displaying "thank you for your payment" page.

90. What are the various methods to pass data from one web page to another web page?

Different methods to pass data from one web page to another:

1. Store the data in a session variable. By storing the data, the data can be passed from one page to another.
2. Store data in a cookie: By storing data in a persistent cookie, data can be passed from one form to another.
3. Set the data in a hidden field and post the data using a submit button.

Short note on passing parameter by reference and returning parameter by reference with examples.

Passing parameter by reference: In PHP, variables can be passed by reference so as to modify them. Variables, statements which have new and references returned from function can be passed.

Example: references returned from function

```
<?php
Function &sample()
{
    $a =1;
    Return &a;
}
Foo(bar());
?>
```

Returning parameter by reference: Returning parameter by reference is used when a function to find to which variable a reference should be bound.

Example:

```
$obj = new foo;  
$myValue = &$obj->getValue(); // $myValue is a reference to $obj-value, which is 42.  
$obj->value = 2;  
echo $myValue;
```

91. How many ways I can redirect a PHP page?

1. Header function in PHP redirects to a new URL

Example:

```
<?php  
    header("Location: http://www.redirecturl.com/");  
?>
```

2. http_redirect() is also used to redirect to a new page or URL.

Syntax:

```
void http_redirect ( [string url [, array params [, bool session = FALSE [, int status]]]] )
```

Here, the URL is the path of the new page. params can be some query parameters followed by whether the session information needs to be passed and the custom response status code.

MYSQL

92. What Is a Persistent Cookie?

Persistent cookie is a cookie which is permanently stored on user's computer in a cookie file. They

are used for tracking the user information of the users who are browsing from a very long time.

They also have the drawbacks of being unsecure, as user can see the cookies which are saved on

the computer.

93. Is PHP a loosely Typed Language? What is the difference between strongly typed and loosely

typed language?

Yes, PHP is a loosely typed language. In this type of language variable doesn't need to be

declared

before their use. This language converts the data according to its given value. Whereas, in strongly

typed language first every type has to be declared (defined) then only it can be used.

94. What is use of in_array() function in php ?

in_array used to checks if a value exists in an array

95. What is the use of mysql_real_escape_string() function?

It is used to escapes special characters in a string for use in an SQL statement

96. Write down the code for save an uploaded file in php.

```
if ($_FILES["file"]["error"] == 0)
{
    move_uploaded_file($_FILES["file"]["tmp_name"],
    "upload/" . $_FILES["file"]["name"]);
    echo "Stored in: " . "upload/" . $_FILES["file"]["name"];
}
```

97. How to create a text file in php?

```
$filename = "/home/user/guest/newfile.txt";
$file = fopen( $filename, "w" );
if( $file == false )
{
    echo ( "Error in opening new file" ); exit();
}
fwrite( $file, "This is a simple test\n" );
fclose( $file );
```

98. How to strip whitespace (or other characters) from the beginning and end of a string ?

The trim() function removes whitespaces or other predefined characters from both sides of a string.

99. What is the importance of "method" attribute in a html form?

"method" attribute determines how to send the form-data into the server. There are two methods, get and post. The default method is get. This sends the form information by appending it on the URL. Information sent from a form with the POST method is invisible to others and has no limits on the amount of information to send.

100. What is the importance of "action" attribute in a html form?

The action attribute determines where to send the form-data in the form submission.

101. What is the use of "enctype" attribute in a html form?

The enctype attribute determines how the form-data should be encoded when submitting it to the server. We need to set enctype as "multipart/form-data" when we are using a form for uploading files

102. How to find current date and time?

The date() function provides you with a means of retrieving the current date and time, applying the format integer parameters indicated in your script to the timestamp provided or

the current local time if no timestamp is given. In simplified terms, passing a time parameter

is optional - if you don't, the current timestamp will be used.

103. What is x+ mode in fopen() used for?

Read/Write. Creates a new file. Returns FALSE and an error if file already exists

104 .How to find the position of the first occurrence of a substring in a string

strpos() is used to find the position of the first occurrence of a substring in a string

105. What is use of header() function in php ?

The header() function sends a raw HTTP header to a client. We can use header()

function for redirection of pages. It is important to notice that header() must be called before any actual output is seen.

In PHP Important to notice the Limitation of HEADER() function is that header() must be called before any actual output is sent. Means must use header function before HTML or any echo statement

There are Number of Use of HEADER() function in php like below

- 1> The header() function use to sends a raw HTTP header to a client.
- 2> We can use header() function for redirection of pages.
- 3> Used to refresh the page on given time interval automatically.
- 4> To send email header content like cc, bcc , reply to etc data and lot more

106. How comparison of objects is done in PHP5?

We use the operator '==' to test is two object are instanced from the same class and have same

attributes and equal values. We can test if two object are refering to the same instance of the same

class by the use of the identity operator '==='.

107. What type of operation is needed when passing values through a form or an URL?

If we would like to pass values through a form or an URL then we need to encode and to decode

them using htmlspecialchars() and urlencode().

108 .What is the main difference between require() and require_once()?

require() and require_once() perform the same task except that the second function checks if the

PHP script is already included or not before executing it.(same for include_once() and include())

109. How is it possible to set an infinite execution time for PHP script?

The set_time_limit(0) added at the beginning of a script sets to infinite the time of execution to no have the PHP error 'maximum execution time exceeded'.It is also possible

to specify this in the

php.ini file.

109. What does the PHP error 'Parse error in PHP – unexpected T_variable at line x' means?

This is a PHP syntax error expressing that a mistake at the line x stops parsing and executing the program.

110. What should we do to be able to export data into an Excel file?

The most common and used way is to get data into a format supported by Excel. For example, it is

possible to write a .csv file, to choose for example comma as separator between fields and then to

open the file with Excel.

111. What is the function `file_get_contents()` usefull for?

`file_get_contents()` lets reading a file and storing it in a string variable.

112. What is the function `mysql_pconnect()` usefull for?

`mysql_pconnect()` ensure a persistent connection to the database, it means that the connection do

not close when the the PHP script ends.

113. How the result set of Mysql be handled in PHP?

The result set can be handled using `mysql_fetch_array`, `mysql_fetch_assoc`, `mysql_fetch_object` or

`mysql_fetch_row`.

114. How is it possible to know the number of rows returned in result set?

The function `mysql_num_rows()` returns the number of rows in a result set.

115. Which function gives us the number of affected entries by a query?

`mysql_affected_rows()` return the number of entries affected by an SQL query.

116. How do I escape data before storing it into the database?

addslashes function enables us to escape data before storage into the database.

117. How is it possible to remove escape characters from a string?

The stripslashes function enables us to remove the escape characters before apostrophes in a string.

118. How can we automatically escape incoming data?

We have to enable the Magic quotes entry in the configuration file of PHP.

119. What does the function get_magic_quotes_gpc() means?

The function get_magic_quotes_gpc() tells us whether the magic quotes is switched on or no.

120. Is it possible to remove the HTML tags from data?

The strip_tags() function enables us to clean a string from the HTML tags.

121. what is the static variable in function useful for?

A static variable is defined within a function only the first time and its value can be modified during

function calls as follows:

```
1.<!--?php function testFunction() { static $testVariable = 1; echo $testVariable;
$testVariable++; }
```

```
testFunction(); //1 testFunction(); //2 testFunction();//3 ?-->
```

122. What is the most convenient hashing method to be used to hash passwords?

It is preferable to use crypt() which natively supports several hashing algorithms or the function

hash() which supports more variants than crypt() rather than using the common hashing algorithms

such as md5, sha1 or sha256 because they are conceived to be fast. hence, hashing passwords with

these algorithms can vulnerability.

123. Which cryptographic extension provide generation and verification of digital signatures?

The PHP-openssl extension provides several cryptographic operations including generation and verification of digital signatures.

124. Will a comparison of an integer 12 and a string "13" work in PHP?

"13" and 12 can be compared in PHP since it casts everything to the integer type.

125. How is it possible to cast types in PHP?

The name of the output type have to be specified in parentheses before the variable which is to be

cast as follows:

- * (int), (integer) – cast to integer

- * (bool), (boolean) – cast to boolean

- * (float), (double), (real) – cast to float

- * (string) – cast to string

- * (array) – cast to array

- * (object) – cast to object

126. How is the ternary conditional operator used in PHP?

It is composed of three expressions: a condition, and two operands describing what instruction

should be performed when the specified condition is true or false as follows:

Expression_1 ?

Expression_2 : Expression_3;

127. What is the function func_num_args() used for?

The function func_num_args() is used to give the number of parameters passed into a function.

128. If the variable \$var1 is set to 10 and the \$var2 is set to the character var1, what's the value

of \$\$var2?

\$\$var2 contains the value 10.

129. What does accessing a class via :: means?

:: is used to access static methods that do not require object initialization.

130. What is faster?

1- Combining two variables as follows:

```
$variable1 = 'Hello ';
```

```
$variable2 = 'World';
```

```
$variable3 = $variable1.$variable2;
```

Or

2-

```
$variable3 = "$variable1$variable2";
```

\$variable3 will contain "Hello World". The first code is faster than the second code especially for

large large sets of data.

131. How is it possible to propagate a session id?

It is possible to propagate a session id via cookies or URL parameters.

132. When sessions ends?

Sessions automatically ends when the PHP script finishes executing, but can be manually ended

using the `session_write_close()`.

133. What is the difference between `session_unregister()` and `session_unset()`?

The `session_unregister()` function unregister a global variable from the current session and the

`session_unset()` function free all session variables.

134. What does `$GLOBALS` means?

`$GLOBALS` is associative array including references to all variables which are currently defined in

the global scope of the script.

135. What does `$_SERVER` means?

`$_SERVER` is an array including information created by the web server such as paths, headers, and

script locations.

2136. What does `$_FILES` means?

`$_FILES` is an associative array composed of items sent to the current script via the HTTP POST

method.

137. What is the difference between `$_FILES['userfile']['name']` and `$_FILES['userfile']['tmp_name']`?

`$_FILES['userfile']['name']` represents the original name of the file on the client machine,

`$_FILES['userfile']['tmp_name']` represents the temporary filename of the file stored on the server.

138. How can we get the error when there is a problem to upload a file?

`$_FILES['userfile']['error']` contains the error code associated with the uploaded file.

139. What does `$_ENV` means?

`$_ENV` is an associative array of variables sent to the current PHP script via the environment

method.

140 .What does `$_COOKIE` means?
`$_COOKIE` is an associative array of variables sent to the current PHP script using the HTTP

Cookies.

141. What does the scope of variables means?

The scope of a variable is the context within which it is defined. For the most part all PHP variables

only have a single scope. This single scope spans included and required files as well.

142. what the difference between the 'BITWISE AND' operator and the 'LOGICAL AND' operator?

\$a and \$b: TRUE if both \$a and \$b are TRUE.

\$a & \$b: Bits that are set in both \$a and \$b are set.

143. What are the two main string operators?

The first is the concatenation operator ('.'), which returns the concatenation of its right and left

arguments. The second is ('.='), which appends the argument on the right to the argument on the

left.

144. What does the array operator '===' means?

\$a === \$b TRUE if \$a and \$b have the same key/value pairs in the same order and of the same

types.

145. What is the differences between \$a != \$b and \$a !== \$b?

!= means inequality (TRUE if \$a is not equal to \$b) and !== means non-identity (TRUE if \$a is not

identical to \$b).

146. How can we determine whether a PHP variable is an instantiated object of a certain class?

To be able to verify whether a PHP variable is an instantiated object of a certain class we use

instanceof.

147. What is the goto statement useful for?

The goto statement can be placed to enable jumping inside the PHP program. The target

is pointed

by a label followed by a colon, and the instruction is specified as a goto statement followed by the

desired target label.15) what is the difference between `Exception::getMessage` and `Exception::getLine` ?

`Exception::getMessage` lets us getting the Exception message and `Exception::getLine` lets us getting

the line in which the exception occurred.

148. What does the expression `Exception::__toString` means?

`Exception::__toString` gives the String representation of the exception.

149. How is it possible to parse a configuration file?

The function `parse_ini_file()` enables us to load in the ini file specified in filename, and returns the

settings in it in an associative array.

150. How can we determine whether a variable is set?

The boolean function `isset` determines if a variable is set and is not NULL.

151. What is the difference between the functions `strstr()` and `stristr()`?

The string function `strstr(string allString, string occ)` returns part of `allString` from the first occurrence of `occ` to the end of `allString`. This function is case-sensitive. `stristr()` is identical to

`strstr()` except that it is case insensitive.

152. what is the difference between `for` and `foreach`?

`for` is expressed as follows:

```
for (expr1; expr2; expr3)
```

```
statement
```

The first expression is executed once at the beginning. In each iteration, `expr2` is evaluated. If it is

TRUE, the loop continues and the statements inside `for` are executed. If it evaluates to

FALSE, the

execution of the loop ends. `expr3` is tested at the end of each iteration.

However, `foreach` provides an easy way to iterate over arrays and it is only used with arrays and

objects.

153. Is it possible to submit a form with a dedicated button?

It is possible to use the `document.form.submit()` function to submit the form. For example:

`<input`

`type=button value="SUBMIT" onClick="document.form.submit()">`22) What is the difference between `ereg_replace()` and `eregi_replace()`?

The function `eregi_replace()` is identical to the function `ereg_replace()` except that it ignores case

distinction when matching alphabetic characters.

154. Is it possible to protect special characters in a query string?

Yes, we use the `urlencode()` function to be able to protect special characters.

155. What are the three classes of errors that can occur in PHP?

The three basic classes of errors are notices (non-critical), warnings (serious errors) and fatal errors

(critical errors).

156. What is the difference between characters `\034` and `\x34`?

`\034` is octal 34 and `\x34` is hex 34.

157. How can we pass the variable through the navigation between the pages?

It is possible to pass the variables between the PHP pages using sessions, cookies or hidden form

fields.

158. Is it possible to extend the execution time of a php script?

The use of the `set_time_limit(int seconds)` enables us to extend the execution time of a php script.

The default limit is 30 seconds.

159. Is it possible to destroy a cookie?

Yes, it is possible by setting the cookie with a past expiration time.

160. What is the default session time in php?

The default session time in php is until closing of browser

161. Is it possible to use COM component in PHP?

Yes, it's possible to integrate (Distributed) Component Object Model components ((D)COM) in

PHP scripts which is provided as a framework.

162. Give Curl example using post method?

```
$postData = array("site" => "web technology experts notes",  
"dailyuser" => "1000",  
"location" => "India"  
);  
$ch = curl_init();  
curl_setopt($ch, CURLOPT_URL, "http://www.example.com");  
curl_setopt($ch, CURLOPT_RETURNTRANSFER, 1);  
curl_setopt($ch, CURLOPT_HEADER, 0);  
curl_setopt($ch, CURLOPT_POST, 1);  
curl_setopt($ch, CURLOPT_POSTFIELDS, $postData);  
$output = curl_exec($ch);  
curl_close($ch)  
echo $output;
```

163. : Difference between array_merge and array_combine in php?

array_merge example

```
$array1 = array('one','two');  
$array2 = array(1,2);  
$result = array_merge($array1,$array2);
```

```
print_r($result);  
array_combine example  
$array1 = array('one','two');  
$array2 = array(1,2);  
$result = array_combine($array1,$array2);  
print_r($result);
```

164. How to convert array to json in php?

```
$array = array('one','two');  
echo json_encode($array); //use json_decode for decode
```

165.: How to serialize an array in php?

```
$array = array('one','two');  
echo serialize($array); //use unserialize for convert serialized string to array
```

166. Examples of IMAP Functions:

1. `imap_list` : Read the list of mailboxes
2. `imap_open` : Opens an IMAP stream to mailbox

Examples of LDAP Functions:

1. `ldap_connect` : This will connect to the ldap server with the given login credentials.
2. `ldap_search` : By using this command we can search in ldap records.

167. 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 SQLite 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`

168. What is autoload in php?

PHP 5 introduced the magic function `__autoload()` which is automatically called when your code references a class or interface that hasn't been loaded yet. ... **PHP** 5.1.2 introduced `spl_autoload()` which allows you to register multiple **autoloader** functions, and in the future the `__autoload()` function will be deprecated.

PHP doesn't use this method because it has the handy little include functions, `include_once` and `require_once`, that prevent you from loading the same file more than once, but unlike a compiled language, PHP re-evaluates these expressions over and over during the evaluation period each time a file containing one or more of these expressions is loaded into the runtime. That is where the Standard PHP Library (SPL), introduced in PHP 5, and the wonderful little [_autoload](#) function come in to enhance the speed and uniformity of your PHP code.

`__autoload` is a magic function, that you define, that enables PHP to let you know when it doesn't have a class loaded, but that class needs to be loaded.

If you define the `__autoload` function like so,

```
function __autoload ($classname)
{
    require('/path/to/my/classes/'.$classname.'.php');
}
```

you no longer need to add

```
require_once('/path/to/my/classes/MyClass.php');
```

into your files, because the first time that PHP encounters

```
$mine = new MyClass();
```

or

```
MyClass::staticMethodCall();
```

it will automatically call the `__autoload` function that you defined earlier.

```
__autoload('MyClass');
```

PHP doesn't do this **EVERY** time it encounters these calls, just the first time. Thus, you no longer need to add the `require_once('/path/to/my/classes/MyClass.php');` to any files at all.

Why is `__autoload` a good thing?

The primary reason is that it improves the performance of your scripts by preventing PHP from checking if the file has already been loaded or not, like it does every time you call `require_once` or `include_once`. Moreover, you no longer have to load a class file just because you **MIGHT** need it during the execution of your script, because PHP will let you know if it is needed, when it is needed.

Of course, if you are sure that a class is not yet loaded, and that you will positively need that class during the execution of your script, you should by all means use the `require()` function to include your file. But from personal experience this is something that rarely happens among files that contain classes. For instance if you have a class that extends another class, you know for sure that the other class will be needed, but do you know for sure that it has not already been loaded? Usually not, because typically, you would be extending that parent class with at least one other child class. But I guess this is not always the case, so you should do what you think is best.

Advanced Usage

`__autoload` also makes it possible to change the include directory for a class based on some identifier in the class name

```
function __autoload ($classname)
{
    if (strpos('MyNamespace', $classname))
    {
        require('/some/other/path/to/my/classes/'.$classname.'.php');
    }
    else
    {
        require('/path/to/my/classes/'.$classname.'.php');
    }
}
```

or translate a class name into a file path location

```
function __autoload ($classname)
{
    //you could also replace '\', if you are using namespacing in PHP 5.3 or greater
    require('/path/to/my/classes/'.str_replace('_', '/', $classname).'.php');
}
```

There are even more techniques that can be used like changing file extensions and so on.

What if I need more than one `__autoload` function in my script?

One of the greatest things about SPL is that it provides a way to define more than one `__autoload` function using [spl_autoload_register](#). If you already have an `__autoload` function you will need to register that function before registering any additional functions though.

```
spl_autoload_register('__autoload');
spl_autoload_register('my_other__autoload');
```

Of course if you do this, you will need to use the `include` function in you autoloaders instead of the `require` function, or check if a file exists in the expected path, otherwise the next function will never get called, because the runtime will encounter a fatal error. Additionally, `spl_autoload_register` accepts any 'callable' type variable, meaning that you can use a method from a class as an autoload function as well.

```
//for a static method  
spl_autoload_register(array('MyAlreadyLoadedClass', 'autoloader'));
```

or

```
//and for an instantiated object method  
spl_autoload_register(array($object, 'someAutoLoader'));
```

169 . Is multiple inheritance supported in php?

No, **PHP** classes can only **inherit** one class, not **multiple**. **PHP** doesn't not **support multiple inheritance** for classes.

In php multilevel inheritance is possible but multiple inheritance is not possible

In simplified terms in php child class can not inherit more than one parent class.

But hierarchical inheritance is possible in php. Hierarchical means Parent inherit property of grand parent class. Grand child inherit property of parent class. So in multilevel inheritance child can get some property of from grand parent class also.

```
class grandParent  
{  
    //Body of your class  
}  
class parent extends grandParent  
{  
    //Body Of your class  
}  
class child extends parent  
{  
    //Body of your class  
}
```

This is very basic example of multilevel inheritance. In php it is possible to implement multilevel inheritance. In above example parent class is inheriting grand parent property. And and child is inheriting parent property. So child have some parent and grand parent property.

170 . Static Methods and Property in Inheritance in PHP

As in our example of HTML_div class we have explored that we can use **\$this->** keyword to get all property and method of parent(HTML) class. But if your parent or child method is static, then you can access static methods or properties using **self** and **parent** keyword. Also this is not necessary to make method static if you want to use self or parent keyword. This is very useful if your parent and child both method is having property or method with same name. If both classes having same property and you want to call specific property or method then you can use this keyword.

```
class HTML
{
protected $name;
protected $id;
protected function basicAttribute
{
return "name='$this->name' id='$this->id'";
}
}
Class HTML_div extends HTML
{
public function __construct($id , $name)
{
$this->id = $id;
$this->name = $name;
}
public function getDiv($content)
{
$basicAttribute = $this->basicAttribute();
return "<div $basicAttribute >$content</div>"
}
}
Class HTML_span extends HTML
{
public function __construct($id , $name)
{
$this->id = $id;
$this->name = $name;
}
public function getSpan($content)
{
$basicAttribute = $this->basicAttribute();
return "<span $basicAttribute >$content</span>"
}
}
```


Self and parent in case of static methods:

```
class parent
{
public static abc()
{
//your function body
}
}
class child
{
public static xyz()
{
//your function body
}
function callStatic()
{
self::xyz();
parent::abc();
}
}
```

Self and Parent without static

```
class parent
{
protected function xyz()
{
//Your function body
}
}
class child extends parent
{
public function xyz()
{
//your function body
}
public function calll()
{
self::xyz();
parent::xyz();
}
}
```

171. Can static function access non-static variables in php?

<?php

```

class Stat
{
    public $var1='H';
    public static $staticVar = 'Static var';

    static function check()
    {

        echo $this->var1;    // This will throw
//    PHP Fatal error:  Using $this when not in object context
    in /var/www/PHP/practice.php on line 13

        echo "<br />".self::$staticVar ."<br />";
        self::$staticVar = 'Changed Static';
        echo self::$staticVar."<br />";
    }

    function check2()
    {
        Stat::check();
        echo $this->var1;
        echo "b";
    }
}

$a = new Stat();
$a->check2();

```

172. what is the difference between self and \$this?

In very general terms, we can say that `$this` is used to reference the current object, whereas `self` is used to access the current class itself.

static methods in PHP are faster than non-static ones

?>

1. What you mean by Object Relational DBMS?

An object-relational database (ORD), or object-relational database management system (ORDBMS), is a database management system (DBMS) similar to a relational database, but with an object-oriented database model: objects, classes and inheritance are directly supported in database schemas and in the query language. In addition, just as with proper relational systems, it supports extension of the data model with custom data-types and methods.

2. Difference between Clustered index and non clustered index ?

Clustered Index

Only one per table

Faster to read than non clustered as data is physically stored in index order

Non Clustered Index

Can be used many times per table

Quicker for insert and update operations than a clustered index

3. Explain about Joins, Views, Normalization, Triggers?

The **JOIN** keyword is used in an SQL statement to query data from two or more tables, based on a relationship between certain columns in these tables.

Tables in a database are often related to each other with keys.

A **view** is a virtual table. A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables in the database.

You can add SQL functions, WHERE, and JOIN statements to a view and present the data as if the data were coming from one single table.

Normalization is the process of efficiently organizing data in a database. There are two goals of the normalization process: eliminating redundant data (for example, storing the same data in more than one table) and ensuring data dependencies make sense (only storing related data in a table). Both of these are worthy goals as they reduce the amount of space a database consumes and ensure that data is logically stored.

First Normal Form (1NF)

sets the very basic rules for an organized database:

Eliminate duplicative columns from the same table.

Create separate tables for each group of related data and identify each row with a unique column or set of columns (the primary key).

Second Normal Form (2NF)

further addresses the concept of removing duplicative data:

Meet all the requirements of the first normal form.

Remove subsets of data that apply to multiple rows of a table and place them in separate tables.

Create relationships between these new tables and their predecessors through the use of foreign keys.

Third Normal Form (3NF)

Meet all the requirements of the second normal form.

Remove columns that are not dependent upon the primary key.

4. Different Types of Tables in Mysql?

There are Five Types Tables in Mysql

1)INNODB

2)MYISAM

3)MERGE

4)HEAP

5)ISAM

5. 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

6. How can we optimize or increase the speed of a MySQL select query?

Answer : • First of all instead of using select * from table1, use select column1, column2, column3.. from table1

- Look for the opportunity to introduce index in the table you are querying.
- use limit keyword if you are looking for any specific number of rows from the result set.

7. List out some tools through which we can draw E-R diagrams for mysql.

Answer :

Case Studio

Smart Draw

8. How can I retrieve values from one database server and store them in other database server using PHP?

Answer : We can always fetch from one database and rewrite to another. Here is a nice solution of it.

```
$db1 = mysql_connect("host","user","pwd");
```

```
mysql_select_db("db1?", $db1);
```

```
$res1 = mysql_query("query",$db1);
```

```
$db2 = mysql_connect("host","user","pwd");
```

```
mysql_select_db("db2?", $db2);
```

```
$res2 = mysql_query("query",$db2);
```

At this point you can only fetch records from your previous ResultSet, i.e \$res1 – But you cannot execute new query in \$db1, even if you supply the link as because the link was overwritten by the new db. so at this point the following script will fail

```
$res3 = mysql_query("query",$db1); //this will fail
```

So how to solve that? take a look below.

```
$db1 = mysql_connect("host","user","pwd");
```

```
mysql_select_db("db1?", $db1);
```

```
$res1 = mysql_query("query",$db1);
```

```
$db2 = mysql_connect("host","user","pwd", true);
```

```
mysql_select_db("db2?", $db2);
```

```
$res2 = mysql_query("query",$db2);
```

So mysql_connect has another optional boolean parameter which indicates whether a link will be created or not. As we connect to the \$db2 with this optional parameter set to 'true', so both link will remain live. Now the following query will execute successfully.

```
$res3 = mysql_query("query",$db1);
```

9. How can we repair a MySQL table?

Answer : The syntax for repairing a MySQL table is REPAIR TABLENAME, [TABLENAME,], [Quick],[Extended]. This command will repair the table specified if the quick is given the

MySQL will do a repair of only the index tree if the extended is given it will create index row by row.

10. What are the advantages of stored procedures, triggers, indexes?

Answer : 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.

11. What is the maximum length of a table name, database name and field name in MySQL?

Answer : The following table describes the maximum length for each type of identifier.

Identifier	Maximum Length(bytes)
Database	64
Table	64
Column	64
Index	64
Alias	255

There are some restrictions on the characters that may appear in identifiers.

12. How many values can the SET function of MySQL take?

Answer : MySQL set can take zero or more values but at the maximum it can take 64 values.

13. What are the other commands to know the structure of table using MySQL commands except explain command?

Answer : describe Table-Name;

14. How many tables will create when we create table, what are they?

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

15. What is the purpose of the following files having extensions 1) .frm 2) .myd 3) .myi? What do these files contain?

Answer : 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.

16. What is maximum size of a database in MySQL?

Answer : If the operating system or file system 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 (2⁵⁶ – 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 table space that can be created from several files. This allows a table to exceed the maximum individual file size. The table space can include raw disk partitions, which allows extremely large tables. The maximum table space 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	

17. Give the syntax of Grant and Revoke commands?

Answer : The generic syntax for grant is as following :

> GRANT [rights] on [database/s] TO [username@hostname] IDENTIFIED BY[password] 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 username@hostname can be either username@localhost, username@hostname and username@% where hostname is any valid hostname and % represents any name, the *.*any condition password is simply the password of user.

The generic syntax for revoke is as following :

> REVOKE [rights] on [database/s] FROM [username@hostname] now rights can be as explained above a) All privileges b) combination of create, drop, select, insert, update and delete etc. username@hostname can be either username@localhost, username@hostname and username@% where hostname is any valid hostname and % represents any name, the *.*any condition

18. How can we find the number of rows in a table using MySQL?

Answer : Use this for mysql>SELECT COUNT(*) FROM table_name;

19. The structure of table view buyers is as follows:

Field	Type	Null	Key	Default	Extra
user_pri_id	int(15)		PR	null	auto_increment
userid	varchar(10)	YES		null	

the value of user_pri_id the last row 999 then What will happen in the following conditions? Condition1: Delete all the rows and insert another row then. What is the starting value for this auto incremented field user_pri_id, Condition2: Delete the last row(having the field value 999) and insert another row then. What is the value for this auto incremented field user_pri_id.

Answer : In both cases let the value for auto increment field be n then next row will have value n+1 i.e. 1000.

20. What is the difference between GROUP BY and ORDER BY in Sql?

Answer : 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 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.

21. What is the difference between char and varchar data types?

Answer : Set char to occupy n bytes and it will take n bytes even if u r storing a value of n-

m bytes Set varchar to occupy n bytes and it will take only the required space and will not use the n bytes eg. name char(15) will waste 10 bytes if we store 'mizan', if each char takes a byte eg. name varchar(15) will just use 5 bytes if we store 'mizan', if each char takes a byte. rest 10 bytes will be free.

22. Below table lists out the major **difference between PRIMARY KEY and UNIQUE KEY**:

	PRIMARY KEY	UNIQUE KEY
NULL	It doesn't allow Null values. Because of this we refer PRIMARY KEY = UNIQUE KEY + Not Null CONSTRAINT	Allows Null value. But only one Null value.
INDEX	By default it adds a clustered index	By default it adds a UNIQUE non-clustered index
LIMIT	A table can have only one PRIMARY KEY Column[s]	A table can have more than one UNIQUE Key Column[s]
CREATE SYNTAX	<p>Below is the sample example for defining a single column as a PRIMARY KEY column while creating a table:</p> <pre>CREATE TABLE dbo.Customer (Id INT NOT NULL PRIMARY KEY, FirstName VARCHAR(100), LastName VARCHAR(100), City VARCHAR(50))</pre> <p>Below is the Sample example for defining multiple columns as PRIMARY KEY. It also shows how we can give name for the PRIMARY KEY:</p> <pre>CREATE TABLE dbo.Customer (Id INT NOT NULL, FirstName VARCHAR(100) NOT NULL, LastName VARCHAR(100), City VARCHAR(50), CONSTRAINT PK_CUSTOMER PRIMARY KEY (Id,FirstName))</pre>	<p>Below is the sample example for defining a single column as a UNIQUE KEY column while creating a table:</p> <pre>CREATE TABLE dbo.Customer (Id INT NOT NULL UNIQUE, FirstName VARCHAR(100), LastName VARCHAR(100), City VARCHAR(50))</pre> <p>Below is the Sample example for defining multiple columns as UNIQUE KEY. It also shows how we can give name for the UNIQUE KEY:</p> <pre>CREATE TABLE dbo.Customer (Id INT NOT NULL, FirstName VARCHAR(100) NOT NULL, LastName VARCHAR(100), City VARCHAR(50), CONSTRAINT UK_CUSTOMER UNIQUE (Id,FirstName))</pre>
ALTER SYNTAX	Below is the Syntax for adding PRIMARY KEY CONSTRAINT on a column when the table is already created and doesn't have any primary key:	Below is the Syntax for adding UNIQUE KEY CONSTRAINT on a column when the table is already created:

	ADD CONSTRAINT PK_CUSTOMER PRIMARY KEY (Id)	UNIQUE (Id)
DROP SYNTAX	Below is the Syntax for dropping a PRIMARY KEY : ALTER TABLE dbo.Customer DROP CONSTRAINT PK_CUSTOMER	Below is the Syntax for dropping a UNIQUE KEY : ALTER TABLE dbo.Customer DROP CONSTRAINT UK_CUSTOMER

Primary Key

- Primary key cannot have a NULL value.
- Each table can have only one primary key.
- By default, Primary key is clustered index and data in the database table is physically organized in the sequence of clustered index.
- Primary key can be related with another table's as a Foreign Key.
- We can generate ID automatically with the help of Auto Increment field. Primary key supports Auto Increment value.

Unique Key

- Unique Constraint may have a NULL value.
- Each table can have more than one Unique Constraint.
- By default, Unique key is a unique non-clustered index.
- Unique Constraint can not be related with another table's as a Foreign Key.
- Unique Constraint doesn't support Auto Increment value.

Foreign Key

- Foreign key is a field in the table that is primary key in another table.
- Foreign key can accept multiple null value.
- Foreign key do not automatically create an index, clustered or non-clustered. You can manually create an index on foreign key.
- We can have more than one foreign key in a table.
- There are actual advantages to having a foreign key be supported with a clustered index, but you get only one per table. What's the advantage? If you are selecting the parent plus all child records, you want the child records next to each other. This is easy to accomplish using a clustered index.
- Having a null foreign key is usually a bad idea. In the example below, the record in [dbo].[child] is what would be referred to as an "orphan record". Think long and hard before doing this.

23. Write a SQL query that displays the difference between the highest and lowest salaries of a database table

"employees". Label the column as DIFFERENCE.

Select max(sal)-min(sal) as Difference from employees;

24. How can we get the ID generated from the previous insert operation?

`SELECT MAX(ID) from tablename;`

25. How to limit the number of rows to 5 that I get out of my database?

`Select * from tablename LIMIT 0, 5;`

26. How to store binary data in MySQL?

Use BLOB data type for the database field.

27. What is difference between `mysql_connect` and `mysql_pconnect`?

`mysql_connect` opens up a database connection every time a page is loaded.

`mysql_pconnect` opens up a

connection, and keeps it open across multiple requests.

`mysql_pconnect` uses less resources, because it does not need to establish a database connection every

time a page is loaded.

28. What is the difference between “Insert”, “Update” and “Modify” events?

INSERT - Add a new record into the database table.

MODIFY - If record is available it modifies otherwise it wont modify.

UPDATE - If record is available it updates the record otherwise it creates a new record.

29. Different SQL JOINS

Before we continue with examples, we will list the types of the different SQL JOINS you can use:

- **INNER JOIN:** Returns all rows when there is at least one match in BOTH tables
- **LEFT JOIN:** Return all rows from the left table, and the matched rows from the right table
- **RIGHT JOIN:** Return all rows from the right table, and the matched rows from the left table
- **FULL JOIN:** Return all rows when there is a match in ONE of the tables

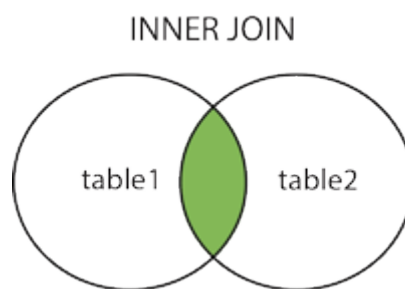
JOIN:

If I do a LEFT JOIN, I get all the records that match in the same way and IN ADDITION I get an extra record for each unmatched record in the left table of the join - thus ensuring (in my example) that every AUTHOR gets a mention:

The INNER JOIN keyword selects all rows from both tables as long as there is a match between the columns in both tables.

SQL INNER JOIN Syntax

```
SELECT column_name(s)
FROM table1
INNER JOIN table2
ON
table1.column_name=table2.c
olumn_name;
```



The INNER JOIN keyword selects all rows from both tables as long as there is a match between the columns. If there are rows in the "Customers" table that do not have matches in "Orders", these customers will NOT be listed.

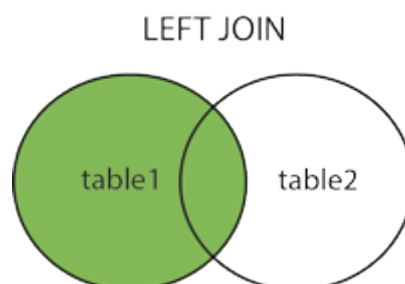
```
SELECT Customers.CustomerName, Orders.OrderID
FROM Customers
INNER JOIN Orders
ON Customers.CustomerID=Orders.CustomerID
ORDER BY Customers.CustomerName;
```

SQL LEFT JOIN Keyword

The LEFT JOIN keyword returns all rows from the left table (table1), with the matching rows in the right table (table2). The result is NULL in the right side when there is no match.

SQL LEFT JOIN Syntax

```
SELECT column_name(s)
FROM table1
LEFT JOIN table2
ON
table1.column_name=table2.c
olumn_name;
```



```
SELECT Customers.CustomerName, Orders.OrderID
FROM Customers
LEFT JOIN Orders
ON Customers.CustomerID=Orders.CustomerID
ORDER BY Customers.CustomerName;
```

Note: The LEFT JOIN keyword returns all the rows from the left table (Customers), even if there are no matches in the right table (Orders).

SQL RIGHT JOIN Keyword

The RIGHT JOIN keyword returns all rows from the right table (table2), with the matching rows in the left table (table1). The result is NULL in the left side when there is no match.

SQL RIGHT JOIN Syntax

```
SELECT column_name(s)
FROM table1
RIGHT JOIN table2
ON table1.column_name=table2.column_name;
```

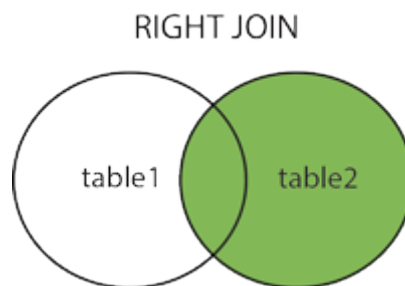
or:

```
SELECT column_name(s)
FROM table1
RIGHT OUTER JOIN table2
ON table1.column_name=table2.column_name;
```

PS! In some databases RIGHT JOIN is called RIGHT OUTER JOIN

```
SELECT Orders.OrderID, Employees.FirstName
FROM Orders
RIGHT JOIN Employees
ON Orders.EmployeeID=Employees.EmployeeID
ORDER BY Orders.OrderID;
```

Note: The RIGHT JOIN keyword returns all the rows from the right table (Employees), even if there are no matches in the left table (Orders).



SQL FULL OUTER JOIN Keyword

The FULL OUTER JOIN keyword returns all rows from the left table (table1) and from the right table (table2).

The FULL OUTER JOIN keyword combines the result of both LEFT and RIGHT joins.

SQL FULL OUTER JOIN Syntax

```
SELECT column_name(s)
FROM table1
FULL OUTER JOIN table2
ON table1.column_name=table2.column_name;
```

```
SELECT Customers.CustomerName, Orders.OrderID
FROM Customers
FULL OUTER JOIN Orders
ON Customers.CustomerID=Orders.CustomerID
ORDER BY Customers.CustomerName;
```

Note: The FULL OUTER JOIN keyword returns all the rows from the left table (Customers), and all the rows from the right table (Orders). If there are rows in "Customers" that do not have matches in "Orders", or if there are rows in "Orders" that do not have matches in "Customers", those rows will be listed as well.

30 .Indexes

An index can be created in a table to find data more quickly and efficiently.

The users cannot see the indexes, they are just used to speed up searches/queries.

Note: Updating a table with indexes takes more time than updating a table without (because the indexes also need an update). So you should only create indexes on columns (and tables) that will be frequently searched against.

SQL CREATE INDEX Syntax

Creates an index on a table. Duplicate values are allowed:

```
CREATE INDEX index_name
ON table_name (column_name)
```

SQL CREATE UNIQUE INDEX Syntax

Creates a unique index on a table. Duplicate values are not allowed:

```
CREATE UNIQUE INDEX index_name
ON table_name (column_name)
```

Note: The syntax for creating indexes varies amongst different databases. Therefore:

Check the syntax for creating indexes in your database.

CREATE INDEX Example

The SQL statement below creates an index named "PIndex" on the "LastName" column in the "Persons" table:

```
CREATE INDEX PIndex  
ON Persons (LastName)
```

If you want to create an index on a combination of columns, you can list the column names within the parentheses, separated by commas:

```
CREATE INDEX PIndex  
ON Persons (LastName, FirstName)
```

Indexes, tables, and databases can easily be deleted/removed with the DROP statement.

The DROP INDEX Statement

The DROP INDEX statement is used to delete an index in a table.

DROP INDEX Syntax for MS Access:

```
DROP INDEX index_name ON table_name
```

DROP INDEX Syntax for MS SQL Server:

```
DROP INDEX table_name.index_name
```

DROP INDEX Syntax for DB2/Oracle:

```
DROP INDEX index_name
```

DROP INDEX Syntax for MySQL:

```
ALTER TABLE table_name DROP INDEX index_name
```

The DROP TABLE Statement

The DROP TABLE statement is used to delete a table.

```
DROP TABLE table_name
```

The DROP DATABASE Statement

The DROP DATABASE statement is used to delete a database.

```
DROP DATABASE database_name
```

The TRUNCATE TABLE Statement

What if we only want to delete the data inside the table, and not the table itself?

Then, use the TRUNCATE TABLE statement:

```
TRUNCATE TABLE table_name
```

31. VIEW:

A view is a virtual table.

This chapter shows how to create, update, and delete a view.

SQL CREATE VIEW Statement

In SQL, a view is a virtual table based on the result-set of an SQL statement.

A view contains rows and columns, just like a real table. The fields in a view are fields from one or more real tables in the database.

You can add SQL functions, WHERE, and JOIN statements to a view and present the data as if the data were coming from one single table.

SQL CREATE VIEW Syntax

```
CREATE VIEW view_name AS  
SELECT column_name(s)  
FROM table_name  
WHERE condition
```

Note: A view always shows up-to-date data! The database engine recreates the data, using the view's SQL statement, every time a user queries a view.

SQL CREATE VIEW Examples

If you have the Northwind database you can see that it has several views installed by default.

The view "Current Product List" lists all active products (products that are not discontinued) from the "Products" table. The view is created with the following SQL:

```
CREATE VIEW [Current Product List] AS  
SELECT ProductID,ProductName
```



```
FROM Products
WHERE Discontinued=No
```

We can query the view above as follows:

```
SELECT * FROM [Current Product List]
```

Another view in the Northwind sample database selects every product in the "Products" table with a unit price higher than the average unit price:

```
CREATE VIEW [Products Above Average Price] AS
SELECT ProductName,UnitPrice
FROM Products
WHERE UnitPrice>(SELECT AVG(UnitPrice) FROM Products)
```

We can query the view above as follows:

```
SELECT * FROM [Products Above Average Price]
```

Another view in the Northwind database calculates the total sale for each category in 1997. Note that this view selects its data from another view called "Product Sales for 1997":

```
CREATE VIEW [Category Sales For 1997] AS
SELECT DISTINCT CategoryName,Sum(ProductSales) AS CategorySales
FROM [Product Sales for 1997]
GROUP BY CategoryName
```

We can query the view above as follows:

```
SELECT * FROM [Category Sales For 1997]
```

We can also add a condition to the query. Now we want to see the total sale only for the category "Beverages":

```
SELECT * FROM [Category Sales For 1997]
WHERE CategoryName='Beverages'
```

SQL Updating a View

You can update a view by using the following syntax:

SQL CREATE OR REPLACE VIEW Syntax

```
CREATE OR REPLACE VIEW view_name AS
SELECT column_name(s)
FROM table_name
WHERE condition
```

Now we want to add the "Category" column to the "Current Product List" view. We will update the view with the following SQL:

```
CREATE OR REPLACE VIEW [Current Product List] AS
SELECT ProductID,ProductName,Category
FROM Products
WHERE Discontinued=No
```

SQL Dropping a View

You can delete a view with the DROP VIEW command.

SQL DROP VIEW Syntax

```
DROP VIEW view_name
```

32. What is the difference between sql and Mysql

SQL or Structured Query Language is a programming language designed for managing data held in a Relational

Database Management System. Mysql is a open source, relational database management System.

33. Why is the basic difference between LEFT JOIN, RIGHT JOIN and INNER JOIN?

INNER join compares two tables and only returns results where a match exists. Records from the 1st table are

uplicated when they match multiple results in the 2nd. INNER joins tend to make result sets smaller, but because

records can be duplicated this isn't guaranteed.

LEFT join means keep all records from the 1st table no matter what and insert NULL values when the 2nd table

doesn't match.

RIGHT means the opposite: keep all records from the 2nd table no matter what and insert NULL values when the 1st

table doesn't match.

34. If we use SUM function in mysql, does it return sum of that row or for that column.

Sum function works on the column basis and will return the sum of that particular row only.

35. Differentiate between DROP a table and TRUNCATE a table.

DROP - It will delete the table and table data.

TRUNCATE - It will delete data of the table but not the table definition.

36. How will you change the name of a column in a table?

```
ALTER TABLE table_name CHANGE old_colm_name new_colm_name
```

37 .Use a regular expression to find records. Use "REGEXP BINARY" to force case-sensitivity. This finds any record beginning with r.

Answer : 16 mysql> SELECT * FROM tablename WHERE rec RLIKE "^r";

38.How to Change a users password from unix shell.

Answers : 22 # [mysql dir]/bin/mysqladmin -u username -h hostname.blah.org -p password 'new-password'

39. How to Change a users password from MySQL prompt. Login as root. Set the password. Update privs.

Answer : 23 # mysql -u root -p

mysql> SET PASSWORD FOR 'user'@'hostname' = PASSWORD('passwordhere');

mysql> flush privileges;

40. How to Recover a MySQL root password. Stop the MySQL server process.

Start again with no grant tables. Login to MySQL as root. Set new password. Exit MySQL and restart MySQL server.

Answer : 24 # /etc/init.d/mysql stop# mysqld_safe --skip-grant-tables &

mysql -u root

mysql> use mysql;

mysql> update user set password=PASSWORD("newrootpassword") where User='root';

mysql> flush privileges;

mysql> quit

/etc/init.d/mysql stop

/etc/init.d/mysql start

41. How To update info already in a table and Delete a row(s) from a table.

Answer : mysql> UPDATE [table name] SET Select_priv = 'Y',Insert_priv = 'Y',Update_priv =

'Y' where [field name] = 'user';

mysql> DELETE from [table name] where [field name] = 'whatever';

Questions : 42. How to Update database permissions/privileges.

Answer : mysql> flush privileges;

Questions : 43. How to Delete a column and Add a new column to database.

Answer : `mysql> alter table [table name] drop column [column name];`

`mysql> alter table [table name] add column [new column name] varchar (20);`

Questions : 44. Change column name and Make a unique column so we get no dupes.

Answer : `mysql> alter table [table name] change [old column name] [new column name] varchar(50);`

`mysql> alter table [table name] add unique ([column name]);`

Questions : 45. How to make a column bigger and Delete unique from table.

Answer : `mysql> alter table [table name] modify [column name] VARCHAR(3);`

`mysql> alter table [table name] drop index [column name];`

Questions : 46. How to Load a CSV file into a table.

Answer : `mysql> LOAD DATA INFILE '/tmp/filename.csv' replace INTO TABLE [table name]`

`FIELDS TERMINATED BY ',' LINES TERMINATED BY '\n' (field1,field2,field3);`

Questions : 47. How to dump all databases for backup. Backup file is sql commands to recreate all db's.

Answer : `# [mysql dir]/bin/mysqldump -u root -ppassword --opt >/tmp/alldatabases.sql`

Questions : 48. How to dump one database for backup.

Answer : `# [mysql dir]/bin/mysqldump -u username -ppassword --databases databasename`

`>/tmp/databasename.sql`

Questions : 49. How to dump a table from a database.

Answer : `# [mysql dir]/bin/mysqldump -c -u username -ppassword databasename tablename >`

`/tmp/databasename.tablename.sql`

Questions : 50. Restore database (or database table) from backup.

Answer : `# [mysql dir]/bin/mysql -u username -ppassword databasename <`

`/tmp/databasename.sql`

Questions : 51. How to Create Table show Example.

Answer : `mysql> CREATE TABLE [table name] (firstname VARCHAR(20), middleinitial VARCHAR(3), lastname VARCHAR(35), suffix VARCHAR(3), officeid VARCHAR(10), userid VARCHAR(15), username VARCHAR(8), email VARCHAR(35), phone VARCHAR(25),`

groups

VARCHAR(15),datestamp DATE,timestamp time,pgpemail VARCHAR(255));

Questions : 52. How to search second maximum(second highest) salary value(integer)from

table employee (field salary)in the manner so that mysql gets less load?

Answers : By below query we will get second maximum(second highest) salary value(integer)from table employee (field salary)in the manner so that mysql gets less load?

SELECT DISTINCT(salary) FROM employee order by salary desc limit 1 , 1 ;

(This way we will able to find out 3rd highest , 4th highest salary so on just need to change limit

condition like LIMIT 2,1 for 3rd highest and LIMIT 3,1 for 4th

some one may finding this way useing below query that taken more time as compare to above query

SELECT salary FROM employee where salary < (select max(salary) from employee) order by salary

DESC limit 1 ;

53. How to connect mysql with php using PDO?

```
$host = "localhost";
```

```
$username = "root";
```

```
$password = "";
```

```
$conn = new PDO("mysql:host=$host;dbname=myDB", $username, $password);
```

```
// set the PDO error mode to exception
```

```
$conn->setAttribute(PDO::ATTR_ERRMODE, PDO::ERRMODE_EXCEPTION);
```

```
echo "Connected successfully";
```

54. On **Linux** start/stop/restart from the command line:

```
/etc/init.d/mysqld start
```

```
/etc/init.d/mysqld stop
```

```
/etc/init.d/mysqld restart
```

1. How can I know that a variable is a number or not using a JavaScript?

Answer : bool is_numeric (mixed var) Returns TRUE if var is a number or a numeric string, FALSE otherwise.or use isNaN(mixed var)The isNaN() function is used to check if a

value is not a number.

2. How can we send mail using JavaScript?

Answer : JavaScript does not have any networking capabilities as it is designed to work on client site. As a result we can not send mails using JavaScript. But we can call the client side mail protocol mailto via JavaScript to prompt for an Email to send. this requires the client to approve it.

3. How can we submit a form without a submit button?

We can submit a form using the JavaScript. Example: `document.formname.submit()`;

3. : Can we send ajax request to other domain?

Answer: No, You can't send Ajax request if different protocol OR different host.

For Example, the following table gives an overview of typical outcomes for checks against the URL "<http://www.example.com/directory/about-us.html>".

4. jQuery Selectors

<u>*</u>	<code>\$("*")</code>	All elements
<u>#id</u>	<code>\$("#lastname")</code>	The element with id="lastname"
<u>.class</u>	<code>\$(".intro")</code>	All elements with class="intro"
<u>.class,.class</u>	<code>\$(".intro,.demo")</code>	All elements with the class "intro" or "demo"
<u>element</u>	<code>\$("p")</code>	All <p> elements
<u>el1,el2,el3</u>	<code>\$("h1,div,p")</code>	All <h1>, <div> and <p> elements
<u>:first</u>	<code>\$("p:first")</code>	The first <p> element
<u>:last</u>	<code>\$("p:last")</code>	The last <p> element
<u>:even</u>	<code>\$("tr:even")</code>	All even <tr> elements
<u>:odd</u>	<code>\$("tr:odd")</code>	All odd <tr> elements
<u>:first-child</u>	<code>\$("p:first-child")</code>	All <p> elements that are the first child of their parent
<u>:first-of-type</u>	<code>\$("p:first-of-type")</code>	All <p> elements that are the first <p> element of their parent
<u>:last-child</u>	<code>\$("p:last-child")</code>	All <p> elements that are the last child of their parent
<u>:last-of-type</u>	<code>\$("p:last-of-type")</code>	All <p> elements that are the last <p> element of their parent
<u>:nth-child(n)</u>	<code>\$("p:nth-child(2)")</code>	All <p> elements that are the 2nd child of their parent
<u>:nth-last-child(n)</u>	<code>\$("p:nth-last-child(2)")</code>	All <p> elements that are the 2nd child of their parent, counting from the last child

5. Ajax :: [Difference between .success\(\) and .complete\(\)](#)?

`.success()` only gets called if your webserver responds with a 200 OK HTTP header - basically when everything is fine.

`success()` is called when the server returns a 200 status code, `complete()` is called always when the request is complete, no matter the outcome.

Whenever an Ajax request completes successfully, jQuery triggers the `ajaxSuccess` event. Any and all handlers that have been registered with the `.ajaxSuccess()` method are executed at this time.

```
$( document ).ajaxSuccess(function( event, request, settings ) {  
    $( "#msg" ).append( "<li>Successful Request!</li>" );  
})
```

However, `.complete()` will *always* get called no matter if the ajax call was successful or not - maybe it outputted errors and returned an error - `.complete()` will still get called.

It's worth mentioning that `.complete()` will get called *after* `.success()` gets called - if it matters to you.

Whenever an Ajax request completes, jQuery triggers the `ajaxComplete` event. Any and all handlers that have been registered with the `.ajaxComplete()` method are executed at this time.

```
$( document ).ajaxComplete(function( event,request, settings ) {  
    $( "#msg" ).append( "<li>Request Complete.</li>" );  
3 });
```