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| **PHP interview questions and answers** |
| |  |  | | --- | --- | | |  | | --- | | **What is PHP?**  PHP: Hypertext Preprocessor is open source server-side scripting language that is widely used for web development. PHP scripts are executed on the server. PHP allows writing dynamically generated web pages efficiently and quickly. The syntax is mostly borrowed from C, Java and perl. PHP is free to download and use.  **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".  **Explain how to submit form without a submit button.**  We can achieve the above task by using JavaScript code linked to an event trigger of any form field and call the document.form.submit() function in JavaScript code.  **Echo vs. print statement.**  echo() and print() are language constructs in PHP, both are used to output strings. The speed of both statements is almost the same.  echo() can take multiple expressions whereas print cannot take multiple expressions.  Print return true or false based on success or failure whereas echo doesn't return true or false.  **$message vs. $$message in PHP.**  $message is a variable with a fixed name. $$message is a variable whose name is stored in $message.   If $message contains "var", $$message is the same as $var.  **Explain the different types of errors in PHP.**  Notices, Warnings and Fatal errors are the types of errors in PHP  Notices:   Notices represents non-critical errors, i.e. accessing a variable that has not yet been defined. By default, such errors are not displayed to the user at all but whenever required, you can change this default behavior.  Warnings:   Warnings are more serious errors but they do not result in script termination. i.e calling include() a file which does not exist. By default, these errors are displayed to the user.  Fatal errors:   Fatal errors are critical errors i.e. calling a non-existent function or class. These errors cause the immediate termination of the script.  Explain the importance of the function htmlentities.  The htmlentities() function converts characters to HTML entities.  **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. | | |

### Write the statements that are used to connect PHP with MySQL

The statements that can be used to connect PHP wil MySQL is:  
<?  
$conn = mysql\_connect('localhost');  
echo $conn;  
?>  
This statement gets the resource of the localhost. There are other different ways with which you can connect to the database and they are as follows:  
<?  
mysql\_connect('db.domain.com:33306','root','user');  
mysql\_connect('localhost:/tmp/mysql.sock');  
mysql\_connect('localhost','rasmus','foobar',  
true,MYSQL\_CLIENT\_SSL|MYSQL\_CLIENT\_COMPRESS);  
?>

### How to use HTTP Headers inside PHP? Write the statement through which it can be added?

HTTP headers can be used in PHP by redirection which is written as:  
<?header('Location: http://www.php.net')?>  
The headers can be added to HTTP response in PHP using the header(). The response headers are sent before any actual response being sent. The HTTP headers have to be sent before taking the output of any data. The statement above gets included at the top of the script.

### Why PHP is also called as Scripting language?

PHP is basically a general purpose language, which is used to write scripts. Scripts are normal computer files that consist of instructions written in PHP language. It tells the computer to execute the file and print the output on the screen. PHP is used for webpages and to create websites, thus included as scripting language.

### Why many companies are switching their current business language to PHP? Where PHP basically used?

PHP is rapidly gaining the popularity and many companies are switching their current language for this language. PHP is a server side scripting language. PHP executes the instructions on the server itself. Server is a computer where the web site is located. PHP is used to create dynamic pages and provides faster execution of the instructions.

### What is the use of PEAR in php?

PEAR is known as PHP Extension and Application Repository. It provides structured library to the PHP users and also gives provision for package maintenance.

### What is the difference between PHP and JavaScript?

The difference lies with the execution of the languages. PHP is server side scripting language, which means that it can’t interact directly with the user. Whereas, JavaScript is client side scripting language, that is used to interact directly with the user..

### What is the difference between $message and $$message?

The main difference between $message and $$message is that former one is a simple variable and later is a reference variable. $message is a variable with a fixed name and it consists of a fixed value. $$messages contains the variable itself.

### What does ODBC do in context with PHP?

PHP supports many databases like dBase, Microsft SQL Server, Oracle, etc. But, it also supports databases like filePro, FrontBase and InterBase with ODBC connectivity. ODBC stands for Open Database connectivity, which is a standard that allows user to communicate with other databases like Access and IBM DB2.

### Why PHP is sometimes called as embedded scripting language?

PHP is a high level language which is used to allow users to write and understand it in human readable form and also use an interpreter to interpret the code which user write for the computer. PHP is used as an embedded scripting language for the web. PHP is embedded in HTML code. HTML tags are used to enclose the PHP language. HTML is used and PHP is code written in it in the same way as you write JavaScript in HTML.

### What is difference between require\_once(), require(), include()?

require() includes and evaluates a specific file, if the file is not found then it shows a Fatal Error.   
require\_once() includes only the file which is not being included before. It is used to be recommended for the files where you have lots of functions stored.   
include() includes the file, even if the file is not found, but it gives a warning to the user to include().

### How the web server interprets PHP and interacts with the client?

After installing and configuring the PHP, the web When PHP is installed, the Web server looks for PHP code that is embedded in HTML file with its extension. The extensions which are used are .php or .phtml. When web server receives a request for the file with an appropriate extension, HTML statements are processed and PHP statements are executed on the server itself. When the processing gets over the output is being shown in HTML statements.

### PHP being an open source is there any support available to it?

PHP is an open source language, and it is been said that it has very less support online and offline. But, PHP is all together a different language that is being developed by group of programmers, who writes the code. There is lots of available support for PHP, which mostly comes from developers and PHP users.

### What are the steps involved to run PHP?

The steps which are involved and required to run PHP is as follows:  
1. Set up the web environment.   
2. Set up the web servers. There are many web servers that are available and the mostly used is Apaches which automatically remains installed with linux distribution and on windows it is easy to install. There are other servers like IIS (Internet information server) provided by Microsoft can be used to set up the web environment.  
3. Install the web server and PHP  
4. Update and administer the system for changes.

### What is the difference between echo, print and printf()?

Echo is the basic type used to print out a string. It just shows the content of the message written using it. It can have multiple parameters as well. print is a construct, it returns TRUE on successful output and FALSE there is no output. It can’t have multiple parameters. Printf() is a function, and not be used as a construct. It allows the string output to be formatted. It is the slowest medium to print the data out.

### Why IDE is recommended for use while programming with PHP?

IDE stands for Integrated Development environment; it is a framework for developing applications. It includes programming editor where you can edit and write the development programs. The features of IDE are as follows:  
1. Debugging: this is the feature which is used to debug or find the bugs in a program  
2. Preview: this is the feature which allow instant preview of the program you are writing  
3. Testing: this is the features that includes built in testing features through which you can check your scripts  
4. FTP: through this you can upload and download the file while connecting to the server.  
5. Project management: it organizes scripts into projects; manages the files in the project; includes file checkout and check-in features.  
6. Backups: it creates backups automatically of your Web site at periodic intervals.

### How PHP statement is different from PHP script?

The difference between PHP statement and PHP script is that statements are set of instructions that tell PHP to perform an action. PHP script consists of a series of PHP statements that it uses for execution. PHP executes statements one at a time till it reaches the end of the script. Example is as follows:  
PHP statement: echo “Hi”;  
PHP script: if (time = midnight)  
{put on pajamas;  
brush teeth;  
go to bed;}

### What are the different types of statements that are present in PHP?

There are four kinds of PHP statements that are present. They are as follows:   
• Simple statement- these are the echo statements and end with a semicolon (;). PHP ignores white spaces between simple statements. Until it finds a semicolon it reads the statement.   
• Complex/Conditional statements: these are the statements which deal with certain conditions that have to beexecuted to meet certain specific requirements. These are if and else block or switch statements. PHP reads the complete statement and doesn’t stop at the first semicolon it encounters. It looks for starting and ending braces to end the execution.  
• Looping statements: statements that are repeated in a block. The feature that enables you to execute the statements repeatedly is called as loop. For example: for loop, while loop, do..while loop.

### How can we increase the execution time of a php script?

By the use of void set\_time\_limit(int seconds)  
Set the number of seconds a script is allowed to run. If this is reached, the script returns a fatal error. The default limit is 30 seconds or, if it exists, the max\_execution\_time value defined in the php.ini. If seconds is set to zero, no time limit is imposed.  
When called, set\_time\_limit() restarts the timeout counter from zero. In other words, if the timeout is the default 30 seconds, and 25 seconds into script execution a call such as set\_time\_limit(20) is made, the script will run for a total of 45 seconds before timing out.

### Write a Hello world program using variable?

To write the hello world program in PHP using variable you need to know the tags that are used in HTML and the PHP coding which is as follows:  
<html>  
<head><title>Hello World Script using Variable</title></head>  
<body>  
<?php  
$salutation = “Hello World!”;  
echo “<p>$salutation</p>”;  
?>  
</body>  
</html>

### How many different types of messages available in PHP?

1. Error message: is received when the script has some problem that is preventing it from running correctly. The message consists of the possible solution or identification of the problem. Ex: Parse error: occurs when there is something gets missed while writing the script.  
2. Warning message: is received when the script find out some problem that doesn’t allow the script to run. These messages are not of very high priority but quite essential to show that there is something wrong with the script. Ex: if you write print\_r() instead of print\_r($varname) then a warning will occur like this:  
Warning: print\_r() expects at least 1 parameter, 0 given  
The script will execute in continuation.   
3. Notice: is received when there is a condition where a script might have an error or may be it is working. Ex: echo variables that don’t exist.

### What does type casting mean in PHP? Explain with an example?

PHP automatically store the data and interprets according to itself. Type casting is a way to assign the variable according to your need and requirement and not allowing PHP to assign it automatically. To specify the type, it can be used like:  
$newint = (int) $var1;  
$newfloat = (float) $var1;  
$newstring = (string) $var1;  
The value in the variable on the right side of the equal sign is stored in the variable on the left side as the specified type.

### How error handling is being handled by PHP?

Error handling is very important in every programming language. PHP uses the trigger to print the error in a program. The example statement is given below:  
If ($height\_of\_door > $height\_of\_house)  
{ trigger\_error(“Impossible condition”,E\_USER\_ERROR); }  
The E\_USER\_ERROR in the statement tells PHP that the condition is an error. Impossible condition is a string message which is displayed when an error is encountered. If the condition comes out to be true then the following message is displayed:  
Fatal error: Impossible condition  
E\_USER\_WARNING or E\_USER\_NOTICE can be used instead of E\_USER\_ERROR, to have PHP treat the condition as a warning or notice. Own statements can be written to perform error handling actions such as send a message, log a message or stop the script. For example:   
If ($height\_of\_door > $height\_of\_house)  
{  
echo “This is impossible<br>”;  
exit();  
}  
If $height\_of\_door is larger than $height\_of\_house, the message is echoed, and exit() stops the script.   
Die statement can be used to display an error message when a function fails.

### What are escaping characters? Explain with an example?

Special characters are the characters that have some special meaning attached to it. Example is $, #, % etc. A backslash (\) before the special symbol is known as escaping characters. For example, two strings produce the same output:  
$string = ‘The variable name is $var1’;  
$string = “The variable name is \$var1”;  
The output from either string is the following:  
The variable name is $var1  
Suppose you want to store a string as follows:  
$string = \_Where is Tom’\_s house\_;  
echo $string;  
The sting can be interpreted by PHP by putting a backslash (\) in front of the single quote. The backslash tells PHP that the single quote does not have any special meaning; it’s just an apostrophe. Example:  
$string = \_Where is Tom\’\_s house\_;

### Write a program to show the joining of two strings in PHP?

Two strings can be joined together by the use of a process called as concatenation. A dot (.) operator is used for this purpose. Example is as follows:  
$string1 = \_Hello\_;  
$string2 = \_World!\_;  
$stringall = $string1.$string2;  
echo $stringall;

### What are the different components used in PHP for formatting?

The components that are used in PHP for formatting are as follows:   
1. %: it tells the start of the formatting instruction.  
2. Padding character (pad): is used to fill out the string when the value to be formatted is smaller than the width assigned. Pad can be a space, a 0, or any character preceded by a single quote (‘).   
3. -: A symbol meaning to left-justify the characters. If this is not included, the characters are right-justified.  
4. width: The number of characters to use for the value. If the value doesn’t fill the width, the padding character is used to pad the value. For example, if the width is 5, the padding character is 0, and the value is 1, the output is 00001.  
5. dec: The number of decimal places to use for a number. This value is preceded by a decimal point.  
6. type: The type of value. Use s(string) for string, f (float) for numbers that you want to format with decimal places.

### What is the use of super-global arrays in PHP?

Super global arrays are the built in arrays that can be used anywhere. They are also called as auto-global as they can be used inside a function as well. The arrays with the longs names such as $HTTP\_SERVER\_VARS, must be made global before they can be used in an array. This $HTTP\_SERVER\_VARS check your php.ini setting for long arrays.

### What is the use of $\_Server and $\_Env?

$\_SERVER and $\_ENV arrays contain different information. The information depends on the server and operating system being used. Most of the information can be seen of an array for a particular server and operating system. The syntax is as follows:  
foreach($\_SERVER as $key =>$value)  
{ echo “Key=$key, Value=$value\n”; }

### What is the difference between $argv and $argc? Give example?

To pass the information into the script from outside, help can be taken from the PHP CLI (Command line interface) method. Suppose addition of two numbers has to be passed to PHP then it can be passed like this on the command line:  
php add.php 2 3  
Here the script name is add.php, and 2 and 3 are the numbers that has to be added by the script. These numbers are available inside the script in an array called $argv. This array contains all the information on the command line; the statement is stored as follows:  
$argv[0]=add.php  
$argv[1]=2  
$argv[2]=3  
So, $argv always contains at least one element — the script name.  
Then, in your script, you can use the following statements:  
$sum = $argv[1] + $argv[2];  
echo $sum;  
$argc is a variable that stores the numbers of elements in $argv. $argc is equal to at least 1, which is saved for the name of the script. Example is $argc=3 using the above statements.

### Write a statement to show the joining of multiple comparisons in PHP?

PHP allows multiple comparisons to be grouped together to determine the condition of the statement. It can be done by using the following syntax:  
comparison1 and|or|xor comparison2 and|or|xor comparison3 and|or|xor.   
The operators that are used with comparisons are as follows:  
1. and: result in positive when both comparisons are true.  
2. or: result in positive when one of the comparisons or both of the comparisons are true.  
3. xor: result in positive when one of the comparisons is true but not both of the comparisons.  
Example:  
$resCity == “Reno” or $resState == “NV” and $name == “Sally”

### How to create reusable code in PHP?

Applications created in PHP often perform the same task in same script or in different scripts. To create a reusable code functions are used. Functions are group of PHP statements that perform a specific task. Example:   
A header and footer can be created for all the web pages which has to be used again and again.   
echo ‘<img src=”greenrule.jpg” width=”100%” height=”7” />  
<address>My Great Company  
<br />1234 Wonderful Rd.  
<br />San Diego, CA 92126  
</address></font>  
<p>or send questions to  
<a href=”mailto:sales@company.com”>sales </a>  
<img src=”greenrule.jpg” width=”100%” height=”7” />’;  
Instead of typing header and footer for each page, a function can be created and used to add footer and header in every page. The function can be named as:  
add\_footer();  
add\_header();

I've been interviewed by many companies for PHP development positions, every company has a slightly different interview process, but there seems to be a lot of commonalities among them. I've outlined below the main areas that companies look for knowledge in, and some questions/answers you may get asked. At the end of the day you will not be able to entirely fake your way through a good interview, but I thought this would be a huge help for newer or mid level developers going into an interview. If you are totally new to PHP or programming [www.teamtreehouse.com](http://www.woodstitch.com/routes.php?c_id=treehouse) is a great place to start. Don't forget to me on Twitter so you can stay up to date with whats going on in the PHP world.

1. What is Object Oriented Programming?

likelihood high

This is usually a pretty open ended question. You should understand classes (objects are instantiated classes), abstract classes, interfaces, methods, properties,inheritance, multiple inheritance as well as why OOP is helpful as compared to procedural programming.

<http://net.tutsplus.com/tutorials/php/object-oriented-php-for-beginners/>

1. In PHP what is the difference between a Class and an Interface?

likelihood high

Interfaces do not contain business logic, only method signatures that define a template that any classes implementing the interface must contain. Lets take an auto mobile for example. If we were to create and interface for a car we would want to define a few methods like drive, stop, turn left , turn right. This mean that any vehicle that is a car (aka implements the interface car) must have methods for these things, If they do not PHP will throw an error. So if your car is an BMW , Honda or Ford it must be able to stop. How it stops is up to each car (or PHP class) but it must be able to stop. Technically we can decide not to use an interface for cars, but then some types of cars are not forced to have a "stop" method.

1. What is MVC?

likelihood high

Most programmers know this, but interviewers will likely look for a deep understanding of MVC, and some explanation or examples on how/why/ when you used it.   
  
MVC- Model, View, Controller - is simply a way of organizing your code into 3 separate layers each with there own job.   
  
Model - Usually contains data access code and all of you business logic code.   
View - Contains markup/design code, generally html,xml, json.   
Controller - Usually contains very little code, just whatever is needed to call the Model code and render the View code.

<http://www.symfony-project.org/book/1_0/02-exploring-symfony-s-code>

1. Explain how a PHP session works?

likelihood high

A PHP session cookie is set in the clients browser, on every request the client sends that cookie to the server. PHP then uses that cookie to select the corresponding session information. By default PHP session\_start() will store session data in files, you can also store sessions in a database.

<http://www.php.net/manual/en/function.session-start.php>

1. What are some of the big changes PHP has gone through in the past few years?

likelihood high

There are a number, but the big ones people are looking for are:   
a. PHP 5.0 realised the object model (AKA OOP).  
b. 5.1 added PDO - for accessing databases.  
c. 5.3 - added namespace support and late static bindings.

<http://en.wikipedia.org/wiki/PHP#Release_history>

1. What is the difference between $\_GET and $\_POST

likelihood high

This is a great question because an interviewer can tell how deeply you understand HTTP and the request/response. If you don't have good understanding of HTTP protocol, google around and get a grasp on it.   
**Good answer**   
Explain the HTTP protocol and how every request contains a method, generally(GET,POST,PUT,DELETE) and what each method signifies.   
**Bad answer**   
$\_GET stores variables passed in url as query strings. $\_POST stores variables past from using method = $\_POST

<http://djce.org.uk/dumprequest>

1. In a PHP class what are the three visibility keywords of a property or method?

likelihood medium

public, private and protected. The default is public.   
Public -> Any class may instantiate the class and call the method or property.   
Protected -> Only the class itself or inherited (children) classes may call a method or property.  
Private -> Only the class itself may call a method or property.

<http://php.net/manual/en/language.oop5.visibility.php>

1. What is Polymorphism?

likelihood medium

Don't get scared by the big word. It's simply the idea that one object can can take on many forms. So in PHP OOP one class "cars" may have two classes that extend it, for example a "Honda" class and a "BMW" class.

<http://stackoverflow.com/questions/210460/try-to-describe-polymorphism-as-easy-as-you-can>

1. How do you load classes in PHP?

likelihood medium

They are trying to gauge your understanding of how class auto loading works. Review the "autoload" and "spl\_autoload\_register" function (note:you should use the later). The autoload function basically triggers a function when a class is instantiated, you can put whatever logic you like in it but generally you want to include the class file based on some sort of naming convention.

<http://www.php.net/manual/en/function.spl-autoload-register.php>

1. What is the value of "$day" in the below code?

likelihood medium

$wed= 1;

$day = ($wed==1) ? 'today' : 'tommorrow';

// $day is now set to 'today'

Companies often ask about the ternary operator (?). which is simply a shorthand for if else statements.

<http://davidwalsh.name/php-shorthand-if-else-ternary-operators>

1. What is the Scope Resolution Operator?

likelihood medium

"::" double colons is the scope operator it is used to call methods of a class that has not been instantiated. You should also understand static methods and how they differ from regular methods.

<http://www.php.net/manual/en/language.oop5.paamayim-nekudotayim.php>  
<http://php.net/manual/en/language.oop5.static.php>

1. What are some PHP Design patterns you have worked with?

likelihood medium

Design patterns are simply commonly used techniques within your code, they often are implemented in different ways so they can be a bit tricky to grasp without writing them yourself. If you are unfamiliar with them I would start by learning the Singleton Pattern and the Strategy Pattern.

<http://www.ibm.com/developerworks/library/os-php-designptrns/>

1. What is the difference between single quotes and double quotes?

likelihood medium

Great answer at below link.

<http://stackoverflow.com/questions/3446216/difference-between-single-quote-and-double-quote-string-in-php>

1. What does ob\_start do?

likelihood medium

Makes it so PHP does not output anything. Companies ask this because many large frameworks wrap a bunch of code in ob\_start() and ob\_get\_clean(). So understanding how that function works is pretty important.

<http://myphpsource.blogspot.com/2010/01/obstart-save-php-output-to-string-php.html>

1. What does "&" mean in '&$var' ?

likelihood medium

'&' indicates a reference

<http://schlueters.de/blog/archives/125-Do-not-use-PHP-references.html>

1. What is the meaning of a final class and a final method?

likelihood medium

Final keywords indicates that the class or method cannot be extended.

<http://php.net/manual/en/language.oop5.final.php>

1. Does PHP support multiple inheritance?

likelihood medium

No. You should understand what multiple inheritance is.

<http://en.wikipedia.org/wiki/Multiple_inheritance>

1. What are some magic methods in PHP, how might you use them?

likelihood medium

Magic methods are basically triggers that occur when particular events happen in your coding. \_\_GET, \_\_SET are magic methods that are called (behind the seen) when you get or set a class property.

<http://php.net/manual/en/language.oop5.magic.php>

1. Are objects in PHP 5 passed by value or reference?

likelihood medium

This is basically a trick questions. To understand how they are passed you need to understand how objects are instantiated. Study the below link:

<http://ca2.php.net/manual/en/language.oop5.references.php>

1. What is the difference between $var and $$var?

likelihood medium

$$var sets the value of $var as a variable.

$day='monday';

$$day='first day of week';

echo $monday; //outputs 'first day of week'

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| |  | | --- | | [1186957](http://stackoverflow.com/questions/1186957) –  user8599 [Jan 22 '10 at 19:16](http://stackoverflow.com/questions/2118755/questions-every-good-php-developer-should-be-able-to-answer#comment2056739_2118755) |   comments disabled on deleted / locked posts / reviews |

**17 Answers**

[active](http://stackoverflow.com/questions/2118755/questions-every-good-php-developer-should-be-able-to-answer?answertab=active#tab-top) [oldest](http://stackoverflow.com/questions/2118755/questions-every-good-php-developer-should-be-able-to-answer?answertab=oldest#tab-top) [votes](http://stackoverflow.com/questions/2118755/questions-every-good-php-developer-should-be-able-to-answer?answertab=votes#tab-top)

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| 50 accepted | Admittedly, I stole this question from somewhere else (can't remember where I read it any more) but thought it was funny:  **Q:** What is T\_PAAMAYIM\_NEKUDOTAYIM? **A:** Its the scope resolution operator (double colon)  An experienced PHP'er immediately knows what it means. Less experienced (and not Hebrew) developers may want to read [this](http://en.wikipedia.org/wiki/Scope_resolution_operator#PHP).  But more serious questions now:  **Q:** What is the cause of this warning: 'Warning: Cannot modify header information - headers already sent', and what is a good practice to prevent it? **A:** \**Cause:*\* body data was sent, causing headers to be sent too. **Prevention:** Be sure to execute header specific code first before you output any body data. Be sure you haven't accidentally sent out whitespace or any other characters.  **Q:** What is wrong with this query: "SELECT \* FROM table WHERE id = $\_POST[ 'id' ]"? **A:** *1.* It is vulnarable to SQL injection. Never use user input directly in queries. Sanitize it first. Preferebly use prepared statements ([PDO](http://php.net/manual/en/book.pdo.php)) *2.* Don't select all columns (\*), but specify every single column. This is predominantly ment to prevent queries hogging up memory when for instance a BLOB column is added at some point in the future.  **Q:** What is wrong with this if statement: if( !strpos( $haystack, $needle ) ...? **A:** strpos returns the index position of where it first found the $needle, which could be 0. Since 0 also resolves to false the solution is to use strict comparison: if( false !== strpos( $haystack, $needle )...  **Q:** What is the preferred way to write this if statement, and why? if( 5 == $someVar ) or if( $someVar == 5 ) **A:** The former, as it prevents accidental assignment of 5 to $someVar when you forget to use 2 equalsigns ($someVar = 5), and will cause an error, the latter won't.  **Q:** Given this code:  function doSomething( &$arg )  {  $return = $arg;  $arg += 1;  return $return;  }  $a = 3;  $b = doSomething( $a );  ...what is the value of $a and $b after the function call and why? **A:** $a is 4 and $b is 3. The former because $arg is passed by reference, the latter because the return value of the function is a copy of (not a reference to) the initial value of the argument.  **OOP specific**  **Q:** What is the difference between public, protected and private in a class definition? **A:** public makes a class member available to "everyone", protected makes the class member available to only itself and derived classes, private makes the class member only available to the class itself.  **Q:** What is wrong with this code:  class SomeClass  {  protected $\_someMember;  public function \_\_construct()  {  $this->\_someMember = 1;  }  public static function getSomethingStatic()  {  return $this->\_someMember \* 5; // here's the catch  }  }  **A:** Static methods don't have access to $this, because static methods can be executed without instantiating a class.  **Q:** What is the difference between an interface and an abstract class? **A:** An interface defines a contract between an implementing class is and an object that calls the interface. An abstract class pre-defines certain behaviour for classes that will extend it. To a certain degree this can also be considered a contract, since it garantuees certain methods to exist.  **Q:** What is wrong with classes that predominantly define getters and setters, that map straight to it's internal members, without actually having methods that execute behaviour? **A:** This might be a code smell since the object acts as an ennobled array, without much other use.  **Q:** Why is PHP's implementation of the use of interfaces sub-optimal? **A:** PHP doesn't allow you to define the expected return type of the method's, which essentially renders interfaces pretty useless. :-P |

**Variables by reference**

By default, function arguments are passed by value (so that if the value of the argument within the function is changed, it does not get changed outside of the function). To allow a function to modify its arguments, they must be passed by reference.

To have an argument to a function always passed by reference, prepend an ampersand (&) to the argument name in the function definition.

<?php  
function add\_some\_extra(&$string)  
{  
 $string .= 'and something extra.';  
}  
$str = 'This is a string, ';  
add\_some\_extra($str);  
echo $str; // outputs 'This is a string, and something extra.'  
?>