

1. What is PHP?

PHP is the general-purpose programming language used to design a website or web application. It is server-side scripting language embedded with HTML to develop a Static website, Dynamic website or Web applications. It was created by Rasmus Lerdorf in 1994.

2. What is the full form of PHP?

PHP is the abbreviation of Hypertext Preprocessor and earlier it was abbreviated as Personal Home Page.

3. What was the old name of PHP?

The old name of PHP was Personal Home Page.

4. What are the uses of PHP?

It is a server-side scripting language used to design dynamic websites or web applications.

It receives data from forms to generate the dynamic page content.

It can work with databases, sessions, send and receive cookies, send emails, etc.

It can be used to add, delete, modify content within the database.

It can be used to set the restriction to the user to access the web page.

5. What is PEAR in PHP?

PEAR is a framework and distribution system for reusable PHP components. It stands for PHP Extension and Application Repository. It contains PHP snippets and a library to reuse the code. It provides a command-line interface to install packages.

6. What is the difference between static and dynamic websites?

Static Website: The web pages are returned from the server which are prebuilt source code files built using simple languages such as HTML, CSS or JavaScript. There is no processing of content on the server in Static Websites.

Dynamic Website: The web pages are returned from the server which is processed during runtime means they are not prebuilt web pages but they are built during runtime according to the user's demand with the help of server-side scripting languages such as PHP, Node.js, ASP.NET and many more supported by the server.

7. What is the correct and the two most common ways to start and finish a PHP block of code?

The PHP code always starts with `<?php` and ends with `?>`. The block of PHP code are:

```
<?php [ --Content of PHP code-- ] ?>
```

8. How to execute a PHP script from the command line?

Use the following steps to run PHP program using command line:

Here we are mentioned the following PHP command line to run PHP program:

Open terminal or command line window.

Go to the specified folder or directory where PHP files are present.

Then we can run PHP code using the command `php file_name.php`

Start the server for testing the php code using the command `php -S localhost:port -t your_folder/`

9. How to display text with a PHP script?

There are two methods echo and print to display the text.

10. Is PHP a case sensitive language?

No, PHP is a partially case sensitive language. It means the variable names are case-sensitive and the function names are not case sensitive i.e. user-defined functions are not case sensitive.

11. What is the main difference between PHP 4 and PHP 5?

PHP 5 added OOPs (object-oriented programming) features and Security.

OOPs Features: PHP 5 introduced a robust OOP model, which was a substantial upgrade from PHP 4. PHP 4 had basic class and object support, but PHP 5 provided comprehensive OOP features, including visibility (public, private, and protected), abstract classes, interfaces, and magic methods like `__construct` and `__destruct`. These enhancements allowed for more scalable and maintainable code.

Performance and Security: PHP 5 offered improved performance over PHP 4 due to an optimized Zend Engine 2, which provided better memory management and faster execution. Security was also enhanced with better error handling and more secure default configurations.

12. What are the rules for naming a PHP variable?

Variables in a program are used to store some values or data that can be used later in a program. PHP has its own way of declaring and storing variables. PHP variable characteristics are listed below:

A variable declared in PHP must begin with a dollar sign (\$), followed by the variable name.

A variable name contains alphanumeric characters and underscores (i.e. 'a-z', 'A-Z', '0-9' and '_') in their name.

The variable name must start with a letter or underscore, not a number.

PHP is a loosely typed language and we do not require to declare the data types of variables, rather PHP assumes it automatically by analyzing the values.

PHP variables are case-sensitive i.e. \$sum and \$SUM are treated differently.

13. How do you define a constant in PHP?

The `define()` function is a fundamental feature in PHP for PHP Defining Constants. It serves to create and retrieve the value of a constant, which is an identifier whose value remains fixed throughout the execution of a script. Unlike variables, constants are defined without the dollar sign (\$) and cannot be altered or undefined once set. Constants are commonly used to store unchanging values such as the domain name of a website (e.g., `www.geeksforgeeks.org`).

14. What are the popular Content Management Systems (CMS) in PHP?

WordPress: WordPress is a free and open-source Content Management System(CMS) framework. It is the most widely used CMS framework of recent time.

Joomla: It is a free and open-source content management system (CMS) for distributing web content. It follows the model-view-controller web application framework that can be used independently.

Magento: It is an open-source and e-commerce platform to develop online business.

Drupal: It is a content management system (CMS) platform developed in PHP and distributed under the GNU (General Public License).

15. What is the purpose of break and continue statement?

break: The break statement immediately terminates the whole iteration of a loop and the program control resumes at the next statement following the loop.

continue: The continue statement skips the current iteration and brings the next iteration early. The continue 2 acts as terminator for case and skips the current iteration of the loop.

16. What are the popular frameworks in PHP?

Laravel

CodeIgniter

Symfony

CakePHP

Yii

Zend Framework

Phalcon

FuelPHP

PHPixie

Slim

17. How to make single and multi-line comments in PHP?

Comments prevent the execution of the statement. It is ignored by the compiler. In PHP, there are two types of comments: single-line comments and multi-line comments.

Single-line comment: The comment is started with double forward-slash (//).

Multi-line comment: The comments are enclosed within /* comment section */

18. What is the use of count() function in PHP?

The PHP count() function counts the number of elements present in the array. The function might return 0 for the variable that has been set to an empty array. Also for the variable which is not set the function returns 0.

19. What are the different types of loop in PHP?

PHP supports four different types of loop which are listed below:

for loop

while loop

do-while loop

foreach loop

20. What is the difference between for and foreach loop in PHP?

The for loop is considered to be openly executing the iteration whereas the foreach loop hides the iteration and visibly simplified.

The performance of foreach loop is considered better in comparison with for loop.

The foreach loop though iterates over an array of elements, the execution is simplified and finish the loop in less time comparing with for loop.

The foreach loop allocates temporary memory for index iterations which makes the overall system redundant its performance in terms of memory allocation.

