

**1. What does PHP stand for?**

- A) Personal Home Page
- B) PHP: Hypertext Preprocessor
- C) Preprocessed Hypertext Page
- D) Preprocessor Home Page

**Answer:** B) PHP: Hypertext Preprocessor

---

**2. PHP scripts are executed on the \_\_\_\_.**

- A) Client
- B) Server
- C) Browser
- D) Compiler

**Answer:** B) Server

---

**3. Which of the following is a valid way to start a PHP script?**

- A) <php>
- B) <?php>
- C) php>
- D) <script>

**Answer:** B) <?php>

---

**4. PHP is a \_\_\_\_ language.**

- A) Compiled
- B) Interpreted
- C) Markup
- D) Declarative

**Answer:** B) Interpreted

---

**5. Which of the following is the correct way to declare a variable in PHP?**

- A) `$variable = "value";`
- B) `variable = "value";`
- C) `var variable = "value";`
- D) `let $variable = "value";`

**Answer:** A) `$variable = "value";`

---

## 6. What is the correct way to end a PHP statement?

- A) `.`
- B) `:`
- C) `;`
- D) `,`

**Answer:** C) `;`

---

## 7. Which of the following is NOT a data type in PHP?

- A) String
- B) Float
- C) Character
- D) Boolean

**Answer:** C) Character

---

## 8. PHP files have the extension:

- A) `.php`
- B) `.ph`
- C) `.html`
- D) `.xml`

**Answer:** A) `.php`

---

## 9. How do you output text in PHP?

- A) `print("text");`
- B) `echo "text";`
- C) `write("text");`
- D) Both A and B

**Answer:** D) Both A and B

---

## 10. What is the default file extension of PHP files?

- A) `.ph`
- B) `.php`
- C) `.phppp`
- D) `.phtml`

**Answer:** B) `.php`

---

## 11. Which of the following is a superglobal variable in PHP?

- A) `$GLOBALS`
- B) `$_POST`
- C) `$_SESSION`
- D) All of the above

**Answer:** D) All of the above

---

## 12. How can you add a comment in PHP?

- A) `# This is a comment`
- B) `// This is a comment`
- C) `/* This is a comment */`
- D) All of the above

**Answer:** D) All of the above

---

## 13. Which function is used to get the length of a string in PHP?

- A) `strlen()`
- B) `strlength()`
- C) `len()`
- D) `string_length()`

**Answer:** A) `strlen()`

---

#### 14. How do you define a constant in PHP?

- A) `const NAME = "value";`
- B) `define("NAME", "value");`
- C) `$NAME = "value";`
- D) Both A and B

**Answer:** D) Both A and B

---

#### 15. PHP is \_\_\_ typed.

- A) Strongly
- B) Weakly
- C) Dynamically
- D) Both B and C

**Answer:** D) Both B and C

---

#### 16. What is the correct way to start a session in PHP?

- A) `begin_session();`
- B) `session_start();`
- C) `start_session();`
- D) `session_begin();`

**Answer:** B) `session_start();`

---

#### 17. What will `echo (5 == "5");` output?

- A) Error
- B) True
- C) False
- D) 1

**Answer:** D) 1

---

## **18. Which of the following is a PHP loop?**

- A) `for`
- B) `while`
- C) `do-while`
- D) All of the above

**Answer:** D) All of the above

---

## **19. How do you terminate a PHP script execution?**

- A) `break;`
- B) `exit();`
- C) `die();`
- D) Both B and C

**Answer:** D) Both B and C

---

## **1. Who is the creator of PHP?**

- A) Dennis Ritchie
- B) Rasmus Lerdorf
- C) James Gosling
- D) Guido van Rossum

**Answer:** B) Rasmus Lerdorf

---

## **2. In which year was PHP created?**

- A) 1990
- B) 1995
- C) 2000
- D) 1989

**Answer:** B) 1995

---

**3. What was the original name of PHP?**

- A) Personal Home Page
- B) PHP Script
- C) PHP Code
- D) Preprocessor Script

**Answer:** A) Personal Home Page

---

**4. Which of the following best describes PHP in its early stages?**

- A) A general-purpose programming language
- B) A tool for creating static HTML pages
- C) A simple set of Common Gateway Interface (CGI) binaries
- D) A database management system

**Answer:** C) A simple set of Common Gateway Interface (CGI) binaries

---

**5. PHP is primarily used for \_\_\_\_.**

- A) System programming
- B) Web development
- C) Game development
- D) Data analysis

**Answer:** B) Web development

---

**6. When did PHP become an open-source project?**

- A) 1995
- B) 1997
- C) 2000
- D) 1999

**Answer:** B) 1997

---

**7. Which version of PHP introduced the Zend Engine?**

- A) PHP 3
- B) PHP 4
- C) PHP 5
- D) PHP 6

**Answer:** B) PHP 4

---

**8. What was the major contribution of PHP 3?**

- A) Object-oriented programming
- B) Introduction of Zend Engine
- C) Cross-platform compatibility and a new parser
- D) Improved security

**Answer:** C) Cross-platform compatibility and a new parser

---

**9. What does "PHP" stand for now?**

- A) Personal Home Page
- B) PHP Hypertext Preprocessor
- C) Programming Home Page
- D) Preprocessor Hypertext Page

**Answer:** B) PHP Hypertext Preprocessor

---

**10. Who developed the Zend Engine for PHP?**

- A) Rasmus Lerdorf
- B) Zeev Suraski and Andi Gutmans
- C) Brendan Eich
- D) James Gosling

**Answer:** B) Zeev Suraski and Andi Gutmans

---

**11. In which year was PHP 5 released?**

- A) 2002
- B) 2004
- C) 2006
- D) 2008

**Answer:** B) 2004

---

**12. Which of the following is a significant feature introduced in PHP 5?**

- A) Namespaces
- B) Object-oriented programming
- C) Anonymous functions
- D) Support for multicore processors

**Answer:** B) Object-oriented programming

---

**13. What was the major reason behind the development of PHP 3?**

- A) To add database functionality
- B) To rewrite PHP as a fully object-oriented language
- C) To rewrite the parser for more robust and extensible language
- D) To improve execution speed

**Answer:** C) To rewrite the parser for more robust and extensible language

---

**14. PHP originally started as a set of CGI binaries written in \_\_\_\_.**

- A) C++
- B) Python
- C) Perl
- D) C

**Answer:** D) C

---

**15. When was PHP 7 released?**



- A) 2012
- B) 2014
- C) 2015
- D) 2016

**Answer:** C) 2015

---

**16. What was the main improvement in PHP 7 over PHP 5?**

- A) Introduction of namespaces
- B) Improved performance with the new Zend Engine (PHPNG)
- C) Support for multicore processors
- D) Built-in database support

**Answer:** B) Improved performance with the new Zend Engine (PHPNG)

---

**17. What does Zend Engine do in PHP?**

- A) Acts as a web server
- B) Compiles PHP code into bytecode
- C) Processes HTML files
- D) Provides database support

**Answer:** B) Compiles PHP code into bytecode

---

**18. Which company was co-founded by the developers of the Zend Engine?**

- A) Zend Technologies
- B) PHP Inc.
- C) Oracle
- D) MySQL

**Answer:** A) Zend Technologies

---

**19. Which version of PHP discontinued support for PHP 4-style constructors?**

- A) PHP 5.3
- B) PHP 5.4

- C) PHP 7.0
- D) PHP 8.0

**Answer:** C) PHP 7.0

---

## **20. Why was PHP 6 never officially released?**

- A) Lack of funding
- B) Too many unresolved bugs
- C) Failure to properly implement Unicode support
- D) Disagreement among developers

**Answer:** C) Failure to properly implement Unicode support

## **1. Which version of PHP introduced object-oriented programming (OOP) features?**

- A) PHP 2
- B) PHP 3
- C) PHP 4
- D) PHP 5

**Answer:** D) PHP 5

---

## **2. Which PHP version introduced the Zend Engine?**

- A) PHP 3
- B) PHP 4
- C) PHP 5
- D) PHP 7

**Answer:** B) PHP 4

---

## **3. What was the main improvement in PHP 7 over PHP 5?**

- A) Introduction of anonymous functions
- B) Improved performance with the PHPNG engine
- C) Deprecated MySQL extension
- D) Support for dynamic typing

**Answer:** B) Improved performance with the PHPNG engine

---

**4. Which PHP version officially introduced namespaces?**

- A) PHP 5.1
- B) PHP 5.3
- C) PHP 5.4
- D) PHP 7.0

**Answer:** B) PHP 5.3

---

**5. In which year was PHP 5 released?**

- A) 2000
- B) 2004
- C) 2006
- D) 2008

**Answer:** B) 2004

---

**6. Which PHP version discontinued support for PHP 4-style constructors?**

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.2
- D) PHP 8.0

**Answer:** B) PHP 7.0

---

**7. PHP 6 was planned to introduce which of the following features?**

- A) Multithreading support
- B) Unicode support
- C) Improved security mechanisms
- D) Anonymous functions

**Answer:** B) Unicode support

---

**8. What was the reason PHP 6 was never officially released?**

- A) Lack of funding
- B) Issues with Unicode implementation
- C) Failure of the Zend Engine
- D) Community disagreement

**Answer:** B) Issues with Unicode implementation

---

**9. When was PHP 7 officially released?**

- A) 2013
- B) 2014
- C) 2015
- D) 2016

**Answer:** C) 2015

---

**10. Which PHP version introduced the `declare(strict_types=1)` directive?**

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.2
- D) PHP 8.0

**Answer:** B) PHP 7.0

---

**11. PHP 4 was officially released in \_\_\_\_.**

- A) 1998
- B) 1999
- C) 2000
- D) 2001

**Answer:** C) 2000

---

**12. Which feature was added in PHP 5.5?**

- A) Generators and `yield`
- B) Type declarations
- C) JIT compilation
- D) Traits

**Answer:** A) Generators and `yield`

---

**13. What is the default PHP version used in most modern environments as of 2025?**

- A) PHP 7.4
- B) PHP 8.0
- C) PHP 8.2
- D) PHP 8.4

**Answer:** C) PHP 8.2

---

**14. Which PHP version introduced the match expression?**

- A) PHP 7.4
- B) PHP 8.0
- C) PHP 8.1
- D) PHP 8.2

**Answer:** B) PHP 8.0

---

**15. What is one key feature introduced in PHP 8.0?**

- A) Anonymous functions
- B) Named arguments
- C) Unicode support
- D) Traits

**Answer:** B) Named arguments

---

**16. PHP 8.1 introduced which of the following features?**

- A) JIT compilation
- B) Fibers
- C) Match expression
- D) Generators

**Answer:** B) Fibers

---

**17. Which version of PHP introduced support for scalar type declarations?**

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.1
- D) PHP 8.0

**Answer:** B) PHP 7.0

---

**18. What was the major performance enhancement introduced in PHP 8.0?**

- A) Match expressions
- B) JIT (Just-In-Time) compilation
- C) Error handling improvements
- D) Improved OOP model

**Answer:** B) JIT (Just-In-Time) compilation

---

**19. Which PHP version deprecated the `magic_quotes` directive?**

- A) PHP 5.2
- B) PHP 5.3
- C) PHP 5.4
- D) PHP 7.0

**Answer:** C) PHP 5.4

---

**20. PHP 5.6 introduced which important feature?**

- A) Variadic functions ( . . . )
- B) Traits
- C) Anonymous functions
- D) Scalar type declarations

**Answer:** A) Variadic functions ( . . . )

### **1. Which PHP version introduced support for anonymous classes?**

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.1
- D) PHP 8.0

**Answer:** B) PHP 7.0

---

### **2. What feature was introduced in PHP 7.1?**

- A) Null coalescing operator
- B) Nullable types
- C) Named arguments
- D) JIT compilation

**Answer:** B) Nullable types

---

### **3. When was PHP 8.0 officially released?**

- A) November 2019
- B) December 2020
- C) October 2021
- D) January 2022

**Answer:** B) December 2020

---

### **4. Which PHP version introduced the spaceship operator (<=>)?**

- A) PHP 5.6
- B) PHP 7.0
- C) PHP 7.3
- D) PHP 8.0

**Answer:** B) PHP 7.0

---

**5. What is the purpose of the JIT (Just-In-Time) compilation introduced in PHP 8.0?**

- A) To improve error reporting
- B) To enhance runtime performance by compiling bytecode into machine code
- C) To add better debugging tools
- D) To allow multithreading in PHP scripts

**Answer:** B) To enhance runtime performance by compiling bytecode into machine code

---

**6. Which PHP version removed support for the `ereg` functions?**

- A) PHP 5.3
- B) PHP 5.5
- C) PHP 5.6
- D) PHP 7.0

**Answer:** A) PHP 5.3

---

**7. Which of the following was introduced in PHP 7.2?**

- A) Object type hinting
- B) Libsodium for cryptography
- C) Nullable types
- D) Match expressions

**Answer:** B) Libsodium for cryptography

---

**8. Which PHP version introduced the `finally` keyword for exception handling?**

- A) PHP 5.3
- B) PHP 5.5
- C) PHP 7.0
- D) PHP 8.0

**Answer:** B) PHP 5.5



---

**9. Which PHP version introduced union types?**

- A) PHP 7.4
- B) PHP 8.0
- C) PHP 7.1
- D) PHP 8.1

**Answer:** B) PHP 8.0

---

**10. What feature was added in PHP 7.3?**

- A) Array destructuring
- B) Trailing commas in function calls
- C) Match expressions
- D) Fibers

**Answer:** B) Trailing commas in function calls

**1. PHP is a \_\_\_\_.**

- A) Client-side scripting language
- B) Server-side scripting language
- C) Markup language
- D) Database

**Answer:** B) Server-side scripting language

---

**2. Which of the following is true about PHP?**

- A) PHP scripts are executed on the server.
- B) PHP can only run on Linux systems.
- C) PHP is a client-side language like JavaScript.
- D) PHP requires a compiler to execute scripts.

**Answer:** A) PHP scripts are executed on the server.

---

**3. PHP is compatible with \_\_\_\_.**

- A) Windows
- B) macOS
- C) Linux
- D) All of the above

**Answer:** D) All of the above

---

**4. Which of the following features of PHP allows it to connect to databases?**

- A) File handling
- B) Session handling
- C) Database integration
- D) Error handling

**Answer:** C) Database integration

---

**5. What is the full form of PHP?**

- A) Personal Hypertext Preprocessor
- B) PHP Hypertext Processor
- C) PHP Hypertext Preprocessor
- D) Programming Hypertext Processor

**Answer:** C) PHP Hypertext Preprocessor

---

**6. PHP is a \_\_\_\_.**

- A) Strongly typed language
- B) Loosely typed language
- C) Statically typed language
- D) High-level compiled language

**Answer:** B) Loosely typed language

---

**7. PHP supports \_\_\_\_.**

- A) Object-Oriented Programming
- B) Procedural Programming
- C) Both A and B
- D) None of the above

**Answer:** C) Both A and B

---

**8. PHP can be embedded into \_\_\_\_.**

- A) Python
- B) HTML
- C) CSS
- D) Java

**Answer:** B) HTML

---

**9. PHP code is enclosed within \_\_\_\_.**

- A) <php></php>
- B) <?php ?>

- C) `<code></code>`
- D) `<script></script>`

**Answer:** B) `<?php ?>`

---

**10. Which of the following extensions is used for PHP files?**

- A) .html
- B) .php
- C) .txt
- D) .xml

**Answer:** B) .php

---

**11. PHP can be used to handle \_\_\_\_.**

- A) Forms
- B) Files
- C) Cookies
- D) All of the above

**Answer:** D) All of the above

---

**12. PHP is an interpreted language, meaning \_\_\_\_.**

- A) It needs to be compiled before running
- B) It is executed line by line by the server
- C) It runs directly on the browser
- D) It doesn't require a web server

**Answer:** B) It is executed line by line by the server

---

**13. Which of the following is a valid PHP function for sending emails?**

- A) `mail()`
- B) `sendMail()`

- C) `email()`
- D) `php_mail()`

**Answer:** A) `mail()`

---

**14. PHP scripts can be executed with \_\_\_\_.**

- A) Apache
- B) IIS
- C) Nginx
- D) All of the above

**Answer:** D) All of the above

---

**15. Which PHP version introduced object-oriented programming (OOP) features?**

- A) PHP 3
- B) PHP 4
- C) PHP 5
- D) PHP 7

**Answer:** C) PHP 5

---

**16. PHP supports which type of databases?**

- A) MySQL
- B) PostgreSQL
- C) SQLite
- D) All of the above

**Answer:** D) All of the above

---

**17. The default port for PHP's built-in web server is \_\_\_\_.**

- A) 80
- B) 8080

- C) 8888
- D) 9000

**Answer:** B) 8080

---

**18. PHP supports file handling functions such as \_\_\_\_.**

- A) `fopen()`
- B) `fread()`
- C) `fwrite()`
- D) All of the above

**Answer:** D) All of the above

---

**19. PHP scripts must be executed on \_\_\_\_.**

- A) A web browser
- B) A web server
- C) A text editor
- D) An IDE

**Answer:** B) A web server

---

**20. PHP is open-source, which means \_\_\_\_.**

- A) It is only available for Linux systems
- B) It is free and its source code is publicly available
- C) It is closed and proprietary
- D) It can only be modified by licensed developers

**Answer:** B) It is free and its source code is publicly available

---

**21. Which superglobal variable is used to collect form data in PHP?**

- A) `$_GET`
- B) `$_POST`
- C) Both A and B
- D) `$_FORM`

**Answer:** C) Both A and B

---

**22. PHP supports which type of loops?**

- A) for
- B) while
- C) foreach
- D) All of the above

**Answer:** D) All of the above

---

**23. PHP sessions are used for \_\_\_\_.**

- A) Encrypting data
- B) Storing user data across multiple pages
- C) Validating user input
- D) None of the above

**Answer:** B) Storing user data across multiple pages

---

**24. Which PHP function is used to check the data type of a variable?**

- A) `gettype()`
- B) `is_type()`
- C) `checktype()`
- D) `variabletype()`

**Answer:** A) `gettype()`

---

**25. PHP can generate \_\_\_\_.**

- A) PDF files
- B) Images
- C) XML files
- D) All of the above

**Answer:** D) All of the above

---

**26. Which PHP feature is used to restrict unauthorized access to web pages?**

- A) Error handling
- B) Authentication and Authorization
- C) File handling
- D) Cookies

**Answer:** B) Authentication and Authorization

---

**27. PHP uses which of the following encryption functions?**

- A) `md5()`
- B) `sha1()`
- C) `hash()`
- D) All of the above

**Answer:** D) All of the above

---

**28. PHP is case-sensitive for \_\_\_\_.**

- A) Functions
- B) Variables
- C) Constants
- D) None of the above

**Answer:** B) Variables

---

**29. Which PHP function is used to terminate script execution?**

- A) `stop()`
- B) `exit()`
- C) `terminate()`
- D) `end()`

**Answer:** B) `exit()`

---



**30. PHP supports which type of array?**

- A) Indexed arrays
- B) Associative arrays
- C) Multidimensional arrays
- D) All of the above

**Answer:** D) All of the above

---

**31. Which PHP feature provides error handling?**

- A) try-catch blocks
- B) Error constants (E\_WARNING, E\_NOTICE)
- C) Custom error handlers
- D) All of the above

**Answer:** D) All of the above

---

**32. What does `isset()` do in PHP?**

- A) Checks if a variable is empty
- B) Checks if a variable is defined
- C) Checks if a variable is set and is not null
- D) Checks if a variable is numeric

**Answer:** C) Checks if a variable is set and is not null

**1. What makes PHP more suitable for web development compared to other scripting languages?**

- A) Its ability to create mobile applications
- B) Built-in support for web-specific tasks like handling forms and interacting with databases
- C) It is slower than other languages
- D) It cannot be embedded into HTML

**Answer:** B) Built-in support for web-specific tasks like handling forms and interacting with databases

---

**2. Which of the following is an advantage of PHP over other server-side scripting languages like JSP or ASP.NET?**

- A) PHP is platform-dependent
- B) PHP is open-source and free to use
- C) PHP has poor community support
- D) PHP does not support object-oriented programming

**Answer:** B) PHP is open-source and free to use

---

**3. PHP is highly compatible with which of the following databases?**

- A) MySQL
- B) Oracle
- C) PostgreSQL
- D) All of the above

**Answer:** D) All of the above

---

**4. Which of the following is a key advantage of PHP over JavaScript?**

- A) PHP can only run on the server
- B) PHP supports dynamic web page creation on the server side
- C) PHP runs on the browser
- D) PHP does not support databases

**Answer:** B) PHP supports dynamic web page creation on the server side

---

**5. Why is PHP considered faster than other scripting languages like Python or Ruby?**

- A) It is compiled rather than interpreted
- B) It uses the Zend Engine, which is optimized for web tasks
- C) It does not support complex operations
- D) It does not require any server to execute

**Answer:** B) It uses the Zend Engine, which is optimized for web tasks

---

**6. Which of the following is a benefit of PHP's loose typing feature?**

- A) PHP always requires variable declaration
- B) PHP automatically converts variable types based on context
- C) PHP only supports integers and strings
- D) PHP is harder to debug

**Answer:** B) PHP automatically converts variable types based on context

---

**7. What makes PHP a preferred choice over ASP.NET for small businesses and startups?**

- A) PHP is proprietary software
- B) PHP is cheaper to host and maintain
- C) PHP has no frameworks available
- D) PHP does not support databases

**Answer:** B) PHP is cheaper to host and maintain

---

**8. Which of the following makes PHP more flexible compared to JSP?**

- A) PHP only supports Windows
- B) PHP can be used with multiple web servers like Apache, Nginx, and IIS
- C) PHP lacks database integration
- D) PHP does not support error handling

**Answer:** B) PHP can be used with multiple web servers like Apache, Nginx, and IIS

---

**9. Why is PHP considered easier to learn compared to other scripting languages like Python or Ruby?**

- A) PHP has a simple and straightforward syntax
- B) PHP requires deep knowledge of computer science
- C) PHP only supports procedural programming
- D) PHP requires a special IDE to run

**Answer:** A) PHP has a simple and straightforward syntax

---

**10. Which advantage does PHP have over Perl for web development?**

- A) PHP is slower than Perl
- B) PHP is designed specifically for web development, while Perl is more general-purpose
- C) PHP lacks built-in database support
- D) PHP does not support regular expressions

**Answer:** B) PHP is designed specifically for web development, while Perl is more general-purpose

---

**11. PHP's compatibility with various operating systems is an advantage because \_\_\_\_.**

- A) It can only run on Windows
- B) It can run on Linux, Windows, macOS, and more
- C) It is restricted to Linux servers
- D) It needs a specific environment to execute

**Answer:** B) It can run on Linux, Windows, macOS, and more

---

**12. Which of the following is an advantage of PHP over Python in web development?**

- A) PHP is not suitable for web development
- B) PHP has a larger number of web-specific libraries and tools
- C) PHP does not have any community support
- D) PHP is slower than Python

**Answer:** B) PHP has a larger number of web-specific libraries and tools

---

**13. PHP's ability to embed directly into HTML provides which advantage?**

- A) Easier integration with web pages
- B) Faster execution than compiled languages
- C) Higher memory consumption
- D) Requires additional software to run

**Answer:** A) Easier integration with web pages

---

**14. What makes PHP cost-effective compared to other scripting languages?**

- A) PHP is open-source and does not require licensing fees
- B) PHP is only available on premium servers
- C) PHP requires a special software to use
- D) PHP does not support open-source tools

**Answer:** A) PHP is open-source and does not require licensing fees

---

**15. Why is PHP considered highly scalable?**

- A) PHP cannot handle a large number of requests
- B) PHP supports frameworks like Laravel and CodeIgniter for building scalable applications
- C) PHP does not support advanced web development features
- D) PHP lacks integration with modern databases

**Answer:** B) PHP supports frameworks like Laravel and CodeIgniter for building scalable applications

---

**16. Which of the following makes PHP advantageous for handling large projects?**

- A) Built-in error handling
- B) Framework support like Laravel and Symfony
- C) Compatibility with various databases
- D) All of the above

**Answer:** D) All of the above

---

**17. PHP is faster than languages like Python for web development because \_\_\_\_.**

- A) PHP scripts are compiled into machine code
- B) PHP is optimized for web servers and dynamic content generation
- C) PHP lacks support for advanced programming features
- D) PHP does not interact with databases

**Answer:** B) PHP is optimized for web servers and dynamic content generation

---

**18. PHP's wide adoption is supported by \_\_\_\_.**

- A) A small developer community
- B) Extensive documentation and tutorials
- C) The lack of a framework ecosystem
- D) No open-source tools

**Answer:** B) Extensive documentation and tutorials

---

**19. PHP supports cross-platform development because \_\_\_\_.**

- A) It is limited to one platform
- B) It runs on all major operating systems and servers
- C) It is only compatible with proprietary software
- D) It does not integrate with modern tools

**Answer:** B) It runs on all major operating systems and servers

---

**20. Why is PHP preferred for CMS development?**

- A) PHP does not support CMS development
- B) Most popular CMSs like WordPress, Drupal, and Joomla are written in PHP
- C) PHP lacks dynamic content features
- D) PHP does not integrate with web servers

**Answer:** B) Most popular CMSs like WordPress, Drupal, and Joomla are written in PHP

---

## 21. Why is PHP highly compatible with cloud services?

- A) PHP can only run on local servers
- B) PHP can interact with cloud APIs and services like AWS, Google Cloud, and Azure
- C) PHP requires proprietary software for cloud integration
- D) PHP does not support modern cloud features

**Answer:** B) PHP can interact with cloud APIs and services like AWS, Google Cloud, and Azure

---

## 22. What makes PHP a good choice for e-commerce platforms?

- A) Lack of security features
- B) Support for payment gateways, shopping carts, and dynamic content generation
- C) PHP is not suitable for e-commerce websites
- D) PHP requires additional tools for every feature

**Answer:** B) Support for payment gateways, shopping carts, and dynamic content generation

---

## 23. Which feature of PHP makes it faster in web development compared to Java?

- A) PHP does not require compilation
- B) PHP lacks advanced programming concepts
- C) PHP is limited to procedural programming
- D) PHP cannot handle complex applications

**Answer:** A) PHP does not require compilation

---

## 24. PHP is widely used for web development because \_\_\_\_.

- A) It has built-in functions for common web tasks like handling forms and cookies
- B) It lacks compatibility with databases
- C) It is only compatible with specific operating systems
- D) It is only suitable for small projects

**Answer:** A) It has built-in functions for common web tasks like handling forms and cookies

---

## 25. Which advantage does PHP offer for website hosting?

- A) PHP websites require expensive hosting services
- B) PHP websites can be hosted on nearly any web server, making it cost-effective
- C) PHP websites only run on IIS
- D) PHP hosting lacks scalability

**Answer:** B) PHP websites can be hosted on nearly any web server, making it cost-effective

---

## 26. Why is PHP considered a flexible language?

- A) PHP supports only one programming paradigm
- B) PHP can be written using both procedural and object-oriented programming styles
- C) PHP cannot interact with external APIs
- D) PHP does not allow dynamic content creation

**Answer:** B) PHP can be written using both procedural and object-oriented programming styles

---

## 27. Which of the following makes PHP easy to debug?

- A) PHP does not support error messages
- B) PHP has built-in error reporting functions like `error_reporting()` and `var_dump()`
- C) PHP cannot display runtime errors
- D) PHP errors require third-party debugging tools

**Answer:** B) PHP has built-in error reporting functions like `error_reporting()` and `var_dump()`

---

## 28. Why is PHP preferred for dynamic content creation compared to static HTML?

- A) PHP allows server-side content generation based on user input or database data
- B) PHP is not suitable for dynamic content
- C) PHP lacks integration with web servers
- D) PHP is slower than static HTML

**Answer:** A) PHP allows server-side content generation based on user input or database data

---



**29. PHP provides better security features compared to other scripting languages because \_\_\_\_.**

- A) It does not require any security implementation
- B) It has built-in functions for encryption, sanitization, and secure sessions
- C) PHP cannot handle user authentication
- D) PHP lacks modern security features

**Answer:** B) It has built-in functions for encryption, sanitization, and secure sessions

---

**30. PHP's wide library and framework support, like Laravel and CodeIgniter, is advantageous because \_\_\_\_.**

- A) It reduces development time by providing pre-built functionalities
- B) PHP lacks support for modern web development
- C) PHP frameworks are not open-source
- D) PHP frameworks increase the complexity of development

**Answer:** A) It reduces development time by providing pre-built functionalities

**1. What is the minimum RAM requirement for running PHP on a server?**

- A) 128 MB
- B) 256 MB
- C) 512 MB
- D) 1 GB

**Answer:** B) 256 MB

---

**2. Which operating system is NOT supported by PHP?**

- A) Windows
- B) Linux
- C) macOS
- D) None of the above

**Answer:** D) None of the above

---

**3. Which of the following is required to run PHP scripts?**

- A) A web server like Apache or Nginx
- B) A database management system
- C) A C++ compiler
- D) An FTP server

**Answer:** A) A web server like Apache or Nginx

---

**4. What is the default port used by Apache web server for PHP?**

- A) 22
- B) 443
- C) 80
- D) 3306

**Answer:** C) 80

---

**5. What is the full form of WAMP?**

- A) Windows, Apache, MySQL, PHP
- B) Windows, Apache, MongoDB, Python
- C) Windows, Angular, MySQL, PHP
- D) None of the above

**Answer:** A) Windows, Apache, MySQL, PHP

---

**6. Which of the following packages is commonly used for PHP installation on macOS?**

- A) WAMP
- B) LAMP
- C) XAMPP
- D) MAMP

**Answer:** D) MAMP

---

**7. Which command is used to check the installed PHP version in the terminal?**

- A) php --version
- B) phpinfo
- C) php -v
- D) php --v

**Answer:** C) php -v

---

**8. PHP can be configured to work with which of the following web servers?**

- A) Apache
- B) Nginx
- C) Microsoft IIS
- D) All of the above

**Answer:** D) All of the above

---

**9. Which PHP configuration file is used to set default settings?**

- A) php.ini
- B) php.conf
- C) httpd.conf
- D) config.php

**Answer:** A) php.ini

---

**10. In which directory is the php.ini file usually located?**

- A) /usr/local/bin
- B) /etc/php
- C) /var/www/html
- D) /home/php

**Answer:** B) /etc/php

---

**11. Which software package includes PHP, MySQL, and Apache for all operating systems?**

- A) XAMPP
- B) LAMP
- C) MAMP
- D) AMPPS

**Answer:** A) XAMPP

---

**12. What does the "L" in LAMP stand for?**

- A) Linux
- B) Light
- C) Localhost
- D) Library

**Answer:** A) Linux

---

**13. What is the purpose of the `phpinfo()` function?**

- A) To display PHP syntax errors
- B) To display the current PHP configuration
- C) To debug PHP code
- D) To manage PHP sessions

**Answer:** B) To display the current PHP configuration

---

#### **14. Which database is most commonly used with PHP?**

- A) PostgreSQL
- B) MySQL
- C) Oracle
- D) MongoDB

**Answer:** B) MySQL

---

#### **15. What is the command to restart Apache on a Linux system?**

- A) sudo service apache restart
- B) sudo systemctl restart apache2
- C) apache -r
- D) restart\_apache

**Answer:** B) sudo systemctl restart apache2

---

#### **16. PHP can be used with which of the following text editors for coding?**

- A) Notepad++
- B) VS Code
- C) Sublime Text
- D) All of the above

**Answer:** D) All of the above

---

#### **17. What is the default extension for PHP files?**

- A) .phpx
- B) .php

- C) .phps
- D) .ph

**Answer:** B) .php

---

### **18. Which function is used to load the PHP configuration details?**

- A) config\_info()
- B) phpinfo()
- C) load\_config()
- D) system\_info()

**Answer:** B) phpinfo()

---

### **19. How can PHP be installed on Ubuntu Linux?**

- A) Using the `apt-get` command
- B) Using the `brew` command
- C) Using the `yum` command
- D) None of the above

**Answer:** A) Using the `apt-get` command

---

### **20. What is the PHP configuration file responsible for?**

- A) Managing server-side logic
- B) Setting PHP directives and runtime configuration
- C) Displaying user interface
- D) Handling database connections

**Answer:** B) Setting PHP directives and runtime configuration

### **MCQs on PHP Data Types**

#### ***1. How many primary data types are there in PHP?***

- A) 4
- B) 6
- C) 8
- D) 10

**Answer: C) 8**

---

**2. Which of the following is NOT a scalar data type in PHP?**

- A) Integer
- B) String
- C) Boolean
- D) Array

**Answer: D) Array**

---

**3. What is the default data type of a variable in PHP if not explicitly assigned?**

- A) Integer
- B) String
- C) NULL
- D) Undefined

**Answer: C) NULL**

---

**4. What will be the output of the following PHP code?**

```
$x = "10" + 20;  
echo $x;
```

- A) 30
- B) 1020
- C) Error
- D) NULL

**Answer: A) 30**

*(PHP automatically converts the string "10" into an integer before performing addition.)*

---

**5. Which data type in PHP is used to store multiple values in a single variable?**

- A) Boolean
- B) String

- C) Array
- D) Object

**Answer:** C) Array

---

**6. Which of the following is NOT a valid PHP data type?**

- A) Object
- B) Resource
- C) Float
- D) Character

**Answer:** D) Character

*(PHP does not have a specific "Character" data type; it treats single characters as strings.)*

---

**7. What will be the output of the following PHP code?**

```
$x = (bool) "false";  
echo $x;
```

- A) false
- B) true
- C) 0
- D) NULL

**Answer:** B) true

*(Any non-empty string is considered `true` in PHP when cast to a boolean.)*

---

**8. What function is used to determine the data type of a variable in PHP?**

- A) datatype()
- B) gettype()
- C) typeof()
- D) var\_type()

**Answer:** B) gettype()

---



**9. What is the range of an Integer in a 32-bit PHP system?**

- A) -2,147,483,648 to 2,147,483,647
- B) -32,768 to 32,767
- C) -128 to 127
- D) Unlimited

**Answer:** A) -2,147,483,648 to 2,147,483,647

---

**10. What will be the output of the following PHP code?**

```
$x = 5.6;  
echo gettype($x);
```

- A) integer
- B) double
- C) float
- D) string

**Answer:** B) double

*(In PHP, float values are internally stored as "double".)*

---

**11. Which PHP function is used to check if a variable is of a specific type?**

- A) is\_type()
- B) gettype()
- C) is\_numeric()
- D) type\_check()

**Answer:** C) is\_numeric()

---

**12. What will be the data type of the variable `$x` in the following PHP code?**

```
$x = NULL;
```

- A) Integer
- B) Undefined
- C) Null
- D) Boolean

**Answer:** C) Null

---

**13. Which of the following functions is used to convert a variable into an integer?**

- A) intval()
- B) floatval()
- C) strval()
- D) toInt()

**Answer:** A) intval()

---

**14. What does the `is_array()` function check in PHP?**

- A) If the variable is an array
- B) If the array is empty
- C) If the array contains integers
- D) If the array has an even number of elements

**Answer:** A) If the variable is an array

---

**15. What will be the output of the following PHP code?**

```
$x = "100";  
$y = (int) $x;  
echo gettype($y);
```

- A) integer
- B) string
- C) float
- D) boolean

**Answer:** A) integer

*(Explicit type casting converts the string "100" into an integer.)*

---

**16. What does the `is_object()` function do in PHP?**

- A) Checks if a variable is an object
- B) Converts a variable into an object
- C) Deletes an object
- D) Checks if a variable is empty

**Answer:** A) Checks if a variable is an object

---

**17. What is the data type of the following variable?**

```
$x = array(1, 2, 3);
```

- A) Integer
- B) String
- C) Array
- D) Object

**Answer:** C) Array

---

**18. What will be the output of the following PHP code?**

```
$x = "10.5";  
$y = (float) $x;  
echo gettype($y);
```

- A) integer
- B) string
- C) float
- D) boolean

**Answer:** C) float

---

**19. What is the use of the `is_resource()` function in PHP?**

- A) To check if a variable is a resource type
- B) To release memory used by a variable
- C) To convert a variable into a resource
- D) To count the number of open files

**Answer:** A) To check if a variable is a resource type

---

**20. Which function is used to check whether a variable is of the `NULL` type?**

- A) `is_null()`
- B) `is_empty()`

- C) is\_void()
- D) is\_none()

**Answer:** A) is\_null()

## MCQs on PHP Variables

**1. Which symbol is used to declare a variable in PHP?**

- A) @
- B) \$
- C) &
- D) #

**Answer:** B) \$

---

**2. What will be the output of the following PHP code?**

```
$x = 10;  
$y = $x;  
$y = 20;  
echo $x;
```

- A) 10
- B) 20
- C) 30
- D) Error

**Answer:** A) 10

*(In PHP, variables are assigned by value by default, so changing \$y does not affect \$x.)*

---

**3. How do you define a constant in PHP?**

- A) `const NAME = "value";`
- B) `$NAME = "value";`
- C) `define("NAME", "value");`
- D) Both A and C

**Answer:** D) Both A and C

---

**4. Which of the following is NOT a valid PHP variable name?**

- A) \$myVar
- B) \$\_var
- C) \$123var
- D) \$my\_var

**Answer: C)** \$123var

*(Variable names cannot start with a number in PHP.)*

---

**5. What is the scope of a variable declared inside a function in PHP?**

- A) Global
- B) Local
- C) Static
- D) Public

**Answer: B)** Local

*(Variables declared inside a function are only accessible within that function.)*

---

**6. What will be the output of the following PHP code?**

```
$x = "Hello";  
$y = &$x;  
$y = "World";  
echo $x;
```

- A) Hello
- B) World
- C) Error
- D) NULL

**Answer: B)** World

*(Using & creates a reference, so changing \$y also changes \$x.)*

---

**7. How do you declare a global variable inside a function in PHP?**

- A) `global $var;`
- B) `define("var", "value");`
- C) `const var = "value";`
- D) `static $var;`

**Answer:** A) `global $var;`

---

**8. What will be the output of the following PHP code?**

```
$var = 5;
function test() {
    static $var = 0;
    $var++;
    echo $var;
}
test();
test();
```

- A) 1 1
- B) 1 2
- C) 6 6
- D) 6 7

**Answer:** B) 1 2

*(Static variables retain their value between function calls.)*

---

**9. Which of the following statements about PHP variables is FALSE?**

- A) PHP variables are case-sensitive
- B) Variable names can contain spaces
- C) PHP variables must start with a letter or underscore
- D) PHP variables do not need to be declared before assignment

**Answer:** B) Variable names can contain spaces

*(Variable names cannot contain spaces in PHP.)*

---

**10. What will be the output of the following PHP code?**

```
$var1 = "10";  
$var2 = 10;  
if ($var1 == $var2) {  
    echo "Equal";  
} else {  
    echo "Not Equal";  
}
```

- A) Equal
- B) Not Equal
- C) Error
- D) NULL

**Answer:** A) Equal

*(The == operator checks for value equality, ignoring type differences.)*

---

**11. What will be the output of the following PHP code?**

```
$var1 = "10";  
$var2 = 10;  
if ($var1 === $var2) {  
    echo "Equal";  
} else {  
    echo "Not Equal";  
}
```

- A) Equal
- B) Not Equal
- C) Error
- D) NULL

**Answer:** B) Not Equal

*(The === operator checks for both value and type equality.)*

---

**12. Which of the following is the correct way to delete a variable in PHP?**

- A) delete \$var;
- B) unset(\$var);
- C) remove(\$var);
- D) \$var = NULL;

**Answer:** B) unset(\$var);

---

**13. What will be the output of the following PHP code?**

```
$var = "PHP";  
unset($var);  
echo $var;
```

- A) PHP
- B) NULL
- C) Undefined variable error
- D) Empty string

**Answer:** C) Undefined variable error

---

**14. What is the correct way to check if a variable is set in PHP?**

- A) `isset($var);`
- B) `check($var);`
- C) `exists($var);`
- D) `validate($var);`

**Answer:** A) `isset($var);`

---

**15. What will be the output of the following PHP code?**

```
$var = NULL;  
if (isset($var)) {  
    echo "Set";  
} else {  
    echo "Not Set";  
}
```

- A) Set
- B) Not Set
- C) Error
- D) NULL

**Answer:** B) Not Set

*(isset(\$var) returns false for NULL values.)*

---

**16. What will be the output of the following PHP code?**

```
define("PI", 3.14);  
echo PI;
```



- A) 3.14
- B) PI
- C) Error
- D) NULL

**Answer:** A) 3.14

---

**17. What will be the output of the following PHP code?**

```
define("PI", 3.14);  
PI = 3.1415;  
echo PI;
```

- A) 3.1415
- B) 3.14
- C) Error
- D) NULL

**Answer:** C) Error

*(Constants cannot be reassigned once defined.)*

---

**18. What function is used to check if a variable is an integer?**

- A) `is_int()`
- B) `is_integer()`
- C) `is_numeric()`
- D) `is_number()`

**Answer:** A) `is_int()`

---

**19. What will be the output of the following PHP code?**

```
$name = "John";  
echo "Hello, $name!";
```

- A) Hello, John!
- B) Hello, \$name!
- C) Error
- D) NULL

**Answer:** A) Hello, John!

*(Variables inside double quotes are interpolated.)*

---

**20. What will be the output of the following PHP code?**

```
$name = 'John';  
echo 'Hello, $name!';
```

- A) Hello, John!
- B) Hello, \$name!
- C) Error
- D) NULL

**Answer:** B) Hello, \$name!

## **MCQs on Scope of Variables in PHP**

**1. What are the types of variable scope in PHP?**

- A) Local, Global, Static, and Function
- B) Local, Global, Static, and Parameter
- C) Public, Private, Protected, and Static
- D) Global, Static, Constant, and Local

**Answer:** B) Local, Global, Static, and Parameter

---

**2. What is the default scope of a variable declared inside a function in PHP?**

- A) Global
- B) Static
- C) Local
- D) Public

**Answer:** C) Local

*(A variable declared inside a function is local to that function and cannot be accessed outside.)*

---

**3. What keyword is used to access a global variable inside a function?**

- A) global
- B) public

- C) static
- D) var

**Answer:** A) global

---

**4. What will be the output of the following PHP code?**

```
$x = 10;  
function test() {  
    echo $x;  
}  
test();
```

- A) 10
- B) Error
- C) NULL
- D) Undefined

**Answer:** B) Error

*(The variable \$x is global and cannot be accessed inside the function unless declared using global \$x.)*

---

**5. How can you access a global variable inside a function?**

- A) global \$var;
- B) use \$var;
- C) function\_var(\$var);
- D) access(\$var);

**Answer:** A) global \$var;

---

**6. What will be the output of the following PHP code?**

```
$x = 5;  
function test() {  
    global $x;  
    $x = 10;  
}  
test();  
echo $x;
```

- A) 5
- B) 10

- C) Error
- D) NULL

**Answer:** B) 10

*(The `global` keyword allows the function to modify the global variable `$x`.)*

---

**7. What will be the output of the following PHP code?**

```
function test() {  
    static $x = 0;  
    $x++;  
    echo $x;  
}  
test();  
test();  
test();
```

- A) 1 1 1
- B) 1 2 3
- C) 0 1 2
- D) Error

**Answer:** B) 1 2 3

*(Static variables retain their values between function calls.)*

---

**8. What is the use of the `static` keyword in PHP?**

- A) To make a variable retain its value between function calls
- B) To make a variable global
- C) To declare a constant
- D) To create an object

**Answer:** A) To make a variable retain its value between function calls

---

**9. What will be the output of the following PHP code?**

```
function test() {  
    static $x = 0;  
    echo $x;  
    $x++;  
}  
test();  
test();
```

```
test();
```

- A) 0 0 0
- B) 1 1 1
- C) 0 1 2
- D) Error

**Answer:** C) 0 1 2

*(Static variables are initialized only once and retain their values between function calls.)*

---

**10. How can you access a global variable inside a function without using `global`?**

- A) Using `$GLOBALS` array
- B) Using `this->var`
- C) Using `const` keyword
- D) Using `define()`

**Answer:** A) Using `$GLOBALS` array

---

**11. What will be the output of the following PHP code?**

```
$x = 10;  
function test() {  
    echo $GLOBALS['x'];  
}  
test();
```

- A) 10
- B) Error
- C) NULL
- D) Undefined

**Answer:** A) 10

*(The `$GLOBALS` array allows access to global variables inside functions.)*

---

**12. What happens if you use a variable inside a function without declaring it as global?**

- A) It will be treated as a local variable
- B) It will use the global value

- C) It will cause an error
- D) It will return NULL

**Answer:** A) It will be treated as a local variable

---

**13. What is the difference between `global` and `$GLOBALS` in PHP?**

- A) `global` creates a copy, `$GLOBALS` directly accesses the global variable
- B) Both work the same way
- C) `global` can be used inside and outside functions, `$GLOBALS` only inside
- D) `$GLOBALS` creates a new variable, `global` does not

**Answer:** A) `global` creates a copy, `$GLOBALS` directly accesses the global variable

---

**14. What will be the output of the following PHP code?**

```
$x = 10;
function test() {
    global $x;
    $x = 20;
}
test();
echo $x;
```

- A) 10
- B) 20
- C) Error
- D) NULL

**Answer:** B) 20

*(Using `global $x;` allows the function to modify the global variable.)*

---

**15. What happens if a global variable is modified inside a function without using `global` or `$GLOBALS`?**

- A) It remains unchanged
- B) It changes
- C) It throws an error
- D) It becomes NULL

**Answer:** A) It remains unchanged

---

**16. What will be the output of the following PHP code?**

```
function test() {  
    static $x = 5;  
    echo $x;  
    $x++;  
}  
test();  
test();  
test();
```

- A) 5 5 5
- B) 5 6 7
- C) 6 7 8
- D) Error

**Answer:** B) 5 6 7

*(Static variables retain their values across function calls.)*

---

**17. What is the best way to make a variable available in multiple functions?**

- A) Use `global` keyword
- B) Use `$GLOBALS` array
- C) Pass it as a function parameter
- D) All of the above

**Answer:** D) All of the above

---

**18. What will be the output of the following PHP code?**

```
$x = 10;  
function test() {  
    static $x = 20;  
    echo $x;  
}  
test();  
echo $x;
```

- A) 10 10
- B) 20 20
- C) 20 10
- D) Error

**Answer:** C) 20 10

*(The static \$x inside test() is different from the global \$x.)*

---

**19. What will be the output of the following PHP code?**

```
$y = 50;
function test() {
    global $y;
    $y = 100;
}
test();
echo $y;
```

- A) 50
- B) 100
- C) Error
- D) NULL

**Answer:** B) 100

*(The global keyword allows modification of the global variable \$y.)*

---

**20. What is the correct way to create a variable that can be used only inside a function but retains its value between function calls?**

- A) global \$var;
- B) static \$var;
- C) define("var", value);
- D) \$GLOBALS['var'] = value;

**Answer:** B) static \$var;

## **MCQs on PHP Arrays and Their Types**

**1. What is an array in PHP?**

- A) A data structure that stores a single value
- B) A data structure that stores multiple values in a single variable
- C) A function in PHP
- D) A class in PHP

**Answer:** B) A data structure that stores multiple values in a single variable



---

**2. How do you declare an array in PHP?**

- A) `$arr = array(1, 2, 3);`
- B) `$arr = [1, 2, 3];`
- C) Both A and B
- D) None of the above

**Answer:** C) Both A and B

*(Both `array()` and `[]` can be used to declare an array in PHP.)*

---

**3. How many types of arrays are there in PHP?**

- A) 2
- B) 3
- C) 4
- D) 5

**Answer:** B) 3

*(PHP supports Indexed Arrays, Associative Arrays, and Multidimensional Arrays.)*

---

**4. What is an indexed array in PHP?**

- A) An array with string keys
- B) An array with numeric keys
- C) An array that contains objects
- D) An array with duplicate values only

**Answer:** B) An array with numeric keys

---

**5. What is an associative array in PHP?**

- A) An array with numeric indexes
- B) An array with string keys
- C) An array that contains objects
- D) An array with no values

**Answer:** B) An array with string keys

---

**6. What is a multidimensional array in PHP?**

- A) An array inside another array
- B) A function that returns an array
- C) An array with keys as numbers
- D) A built-in PHP class

**Answer:** A) An array inside another array

---

**7. How do you access an element of an indexed array?**

- A) `$arr["key"];`
- B) `$arr[0];`
- C) `array_get($arr, 0);`
- D) `$arr->get(0);`

**Answer:** B) `$arr[0];`

*(Indexed arrays use numeric keys starting from 0.)*

---

**8. How do you access an element of an associative array?**

- A) `$arr[0];`
- B) `$arr["name"];`
- C) `array_get($arr, "name");`
- D) `$arr->get("name");`

**Answer:** B) `$arr["name"];`

---

**9. How do you declare an associative array in PHP?**

- A) `$arr = array("name" => "John", "age" => 25);`
- B) `$arr = ["name" => "John", "age" => 25];`
- C) Both A and B
- D) None of the above

**Answer:** C) Both A and B

---

**10. What will be the output of the following PHP code?**

```
$arr = ["apple", "banana", "cherry"];  
echo $arr[1];
```

- A) apple
- B) banana
- C) cherry
- D) Error

**Answer:** B) banana

*(Arrays in PHP are zero-indexed, so index 1 refers to "banana".)*

---

**11. Which function is used to count the number of elements in an array?**

- A) `sizeof($arr);`
- B) `count($arr);`
- C) Both A and B
- D) None of the above

**Answer:** C) Both A and B

---

**12. How do you add a new element to an existing array?**

- A) `$arr[] = "new_value";`
- B) `array_push($arr, "new_value");`
- C) Both A and B
- D) None of the above

**Answer:** C) Both A and B

---

**13. What will be the output of the following PHP code?**

```
$arr = ["a" => "apple", "b" => "banana"];  
echo $arr["b"];
```

- A) apple
- B) banana
- C) Error
- D) NULL

**Answer:** B) banana

*(Associative arrays use string keys, so `$arr["b"]` gives "banana".)*

---

**14. How do you remove the last element from an array in PHP?**

- A) `array_pop($arr);`
- B) `array_shift($arr);`
- C) `unset($arr);`
- D) `delete_last($arr);`

**Answer:** A) `array_pop($arr);`

---

**15. What does the `array_keys()` function do in PHP?**

- A) Returns an array of all keys from an array
- B) Returns an array of all values from an array
- C) Removes duplicate keys
- D) Sorts an array by keys

**Answer:** A) Returns an array of all keys from an array

---

**16. What does the `array_values()` function do in PHP?**

- A) Returns an array of all keys from an array
- B) Returns an array of all values from an array
- C) Removes duplicate values
- D) Sorts an array by values

**Answer:** B) Returns an array of all values from an array

---

**17. How do you merge two arrays in PHP?**

- A) `array_merge($arr1, $arr2);`
- B) `merge($arr1, $arr2);`
- C) `$arr1 + $arr2;`
- D) `combine($arr1, $arr2);`

**Answer:** A) `array_merge($arr1, $arr2);`

---

**18. What will be the output of the following PHP code?**

```
$arr1 = ["a" => "apple", "b" => "banana"];  
$arr2 = ["b" => "blueberry", "c" => "cherry"];  
$result = array_merge($arr1, $arr2);  
print_r($result);
```

- A) `["a" => "apple", "b" => "banana", "b" => "blueberry", "c" => "cherry"]`
- B) `["a" => "apple", "b" => "blueberry", "c" => "cherry"]`
- C) `["a" => "apple", "b" => "banana", "c" => "cherry"]`
- D) Error

**Answer:** B) `["a" => "apple", "b" => "blueberry", "c" => "cherry"]`

*(array\_merge() replaces duplicate keys with values from the second array.)*

---

**19. Which function sorts an associative array by its values in ascending order?**

- A) `sort($arr);`
- B) `asort($arr);`
- C) `ksort($arr);`
- D) `rsort($arr);`

**Answer:** B) `asort($arr);`

---

**20. What will be the output of the following PHP code?**

```
$arr = ["fruit" => "apple", "vegetable" => "carrot"];  
unset($arr["fruit"]);  
print_r($arr);
```

- A) `["fruit" => "apple"]`
- B) `["vegetable" => "carrot"]`
- C) `["fruit" => "apple", "vegetable" => "carrot"]`
- D) NULL

**Answer:** B) `["vegetable" => "carrot"]`

*(The unset() function removes "fruit" from the array.)*

## MCQs on PHP Strings

### 1. What is a string in PHP?

- A) A sequence of characters
- B) A numeric data type
- C) A function in PHP
- D) An array

**Answer:** A) A sequence of characters

---

### 2. Which of the following is the correct way to declare a string in PHP?

- A) `$str = 'Hello World';`
- B) `$str = "Hello World";`
- C) `$str = <<<EOT Hello World EOT;`
- D) All of the above

**Answer:** D) All of the above

*(Strings in PHP can be declared using single quotes ('), double quotes ("), and heredoc syntax (<<<EOT).)*

---

### 3. What is the difference between single-quoted and double-quoted strings in PHP?

- A) There is no difference
- B) Single-quoted strings do not process variables, but double-quoted strings do
- C) Double-quoted strings are faster than single-quoted strings
- D) Single-quoted strings are used for numbers, double-quoted for text

**Answer:** B) Single-quoted strings do not process variables, but double-quoted strings do

---

### 4. What will be the output of the following PHP code?

```
$name = "John";  
echo 'Hello $name';
```

- A) Hello John
- B) Hello \$name
- C) Error
- D) Undefined

**Answer:** B) Hello \$name

*(Single-quoted strings do not process variables, so \$name is treated as plain text.)*

---

**5. What will be the output of the following PHP code?**

```
$name = "John";  
echo "Hello $name";
```

- A) Hello John
- B) Hello \$name
- C) Error
- D) Undefined

**Answer:** A) Hello John

*(Double-quoted strings process variables, so \$name is replaced with "John".)*

---

**6. Which function is used to find the length of a string in PHP?**

- A) strlen()
- B) length()
- C) count()
- D) strlength()

**Answer:** A) strlen()

**7. What will be the output of `strlen("Hello")`?**

- A) 5
- B) 6
- C) 4
- D) Error

**Answer:** A) 5

**8. Which function is used to count the number of words in a string?**

- A) str\_count()
- B) word\_count()

- C) `str_word_count()`
- D) `strlen()`

**Answer:** C) `str_word_count()`

---

**9. What will be the output of `str_word_count("Hello World!")`?**

- A) 1
- B) 2
- C) 3
- D) Error

**Answer:** B) 2

---

**10. Which function is used to reverse a string in PHP?**

- A) `reverse()`
- B) `strrev()`
- C) `str_reverse()`
- D) `flip_string()`

**Answer:** B) `strrev()`

---

**11. What will be the output of `strrev("Hello")`?**

- A) Hello
- B) olleH
- C) hElLo
- D) Error

**Answer:** B) olleH

---

**12. Which function is used to convert a string to lowercase?**

- A) `strtolower()`
- B) `toLowerCase()`
- C) `lower()`
- D) `str_lower()`



**Answer:** A) `strtolower()`

---

**13. What will be the output of `strtolower("Hello WORLD")`?**

- A) hello world
- B) HELLO WORLD
- C) Hello WORLD
- D) Error

**Answer:** A) hello world

---

**14. Which function is used to convert a string to uppercase?**

- A) `strtoupper()`
- B) `toUpperCase()`
- C) `upper()`
- D) `str_upper()`

**Answer:** A) `strtoupper()`

---

**15. What will be the output of `strtoupper("hello world")`?**

- A) hello world
- B) HELLO WORLD
- C) Hello WORLD
- D) Error

**Answer:** B) HELLO WORLD

---

**16. Which function is used to extract a portion of a string?**

- A) `substr()`
- B) `slice()`
- C) `substring()`
- D) `str_extract()`

**Answer:** A) `substr()`

---

**17. What will be the output of `substr("Hello World", 6, 5)`?**

- A) Hello
- B) World
- C) lo Wo
- D) Error

**Answer:** B) World

*(Extracts 5 characters starting from index 6.)*

---

**18. How do you replace part of a string in PHP?**

- A) `str_replace()`
- B) `replace()`
- C) `substr_replace()`
- D) `string_replace()`

**Answer:** A) `str_replace()`

---

**19. What will be the output of `str_replace("world", "PHP", "Hello world")`?**

- A) Hello world
- B) Hello PHP
- C) Hello
- D) PHP world

**Answer:** B) Hello PHP

*(Replaces "world" with "PHP" in the given string.)*

---

**20. Which function removes whitespace from both ends of a string?**

- A) `trim()`
- B) `strip()`
- C) `remove_space()`
- D) `clear_whitespace()`

**Answer:** A) `trim()`

## MCQs on PHP Operators

### 1. What are operators in PHP?

- A) Special characters that perform operations on variables and values
- B) Functions in PHP
- C) Data types in PHP
- D) Keywords in PHP

**Answer:** A) Special characters that perform operations on variables and values

---

### 2. Which of the following is an arithmetic operator in PHP?

- A) +
- B) \*
- C) %
- D) All of the above

**Answer:** D) All of the above

---

### 3. What is the output of `echo 5 + 3;?`

- A) 8
- B) 53
- C) 15
- D) Error

**Answer:** A) 8

---

### 4. What does the % operator do in PHP?

- A) Division
- B) Modulus (remainder)
- C) Multiplication
- D) Exponentiation

**Answer:** B) Modulus (remainder)

---

**5. What will be the output of `echo 10 % 3;`?**

- A) 3
- B) 1
- C) 0
- D) Error

**Answer:** B) 1

---

**6. Which operator is used for exponentiation in PHP 5.6+?**

- A) ^
- B) \*\*
- C) ^^
- D) exp ()

**Answer:** B) \*\*

---

**7. What will be the output of `echo 2 ** 3;`?**

- A) 6
- B) 8
- C) 9
- D) Error

**Answer:** B) 8

---

**8. Which of the following is an assignment operator in PHP?**

- A) =
- B) +=
- C) -=
- D) All of the above

**Answer:** D) All of the above

---

**9. What will be the output of the following code?**

```
php
CopyEdit
$x = 5;
$x += 3;
echo $x;
```

- A) 8
- B) 5
- C) 3
- D) Error

**Answer:** A) 8

---

**10. Which of the following is a comparison operator in PHP?**

- A) ==
- B) !=
- C) <=
- D) All of the above

**Answer:** D) All of the above

---

**11. What is the difference between == and === in PHP?**

- A) == checks value, === checks both value and data type
- B) === is faster than ==
- C) == checks data type, === does not
- D) They are the same

**Answer:** A) == checks value, === checks both value and data type

---

**12. What will be the output of `echo (5 == "5");`?**

- A) 1
- B) 0
- C) Error
- D) NULL

**Answer:** A) 1

*(Because == checks only value, not data type.)*

---

**13. What will be the output of `echo (5 === "5") ;?`**

- A) 1
- B) 0
- C) Error
- D) NULL

**Answer: B) 0**

*(Because === checks both value and type.)*

---

**14. What does the `!=` operator mean?**

- A) Not equal
- B) Greater than
- C) Less than
- D) Assignment

**Answer: A) Not equal**

---

**15. What does the `<=>` (Spaceship) operator return when the left operand is greater than the right?**

- A) -1
- B) 0
- C) 1
- D) NULL

**Answer: C) 1**

---

**16. Which operator is used for logical AND in PHP?**

- A) `&&`
- B) `and`
- C) Both A and B
- D) `&`

**Answer:** C) Both A and B

---

**17. What will be the output of `echo (true && false);`?**

- A) 1
- B) 0
- C) NULL
- D) Error

**Answer:** B) 0

---

**18. What is the output of `echo (true || false);`?**

- A) 1
- B) 0
- C) NULL
- D) Error

**Answer:** A) 1

---

**19. What is the result of `echo !(true);`?**

- A) 1
- B) 0
- C) NULL
- D) Error

**Answer:** B) 0

---

**20. What is the ternary operator syntax in PHP?**

- A) `condition ? true_value : false_value;`
- B) `condition : true_value ? false_value;`
- C) `true_value ? condition : false_value;`
- D) None of the above

**Answer:** A) `condition ? true_value : false_value;`

---

**21. What will be the output of `echo (5 > 3) ? "Yes" : "No";`?**

- A) Yes
- B) No
- C) 1
- D) 5

**Answer:** A) Yes

---

**22. What is the null coalescing operator in PHP?**

- A) ??
- B) ?:
- C) ::
- D) &&

**Answer:** A) ??

---

**23. What does `$x ?? "Default";` return if `$x` is undefined?**

- A) Default
- B) NULL
- C) Error
- D) 0

**Answer:** A) Default

---

**24. What is the result of `echo 5 & 3;`?**

- A) 1
- B) 5
- C) 3
- D) 2

**Answer:** D) 2

\*(Bitwise AND operation: 5 (101) & 3 (011) = 001 (2))



---

**25. What will be the result of `echo 5 | 3;`?**

- A) 5
- B) 3
- C) 7
- D) 2

**Answer:** C) 7

\*(Bitwise OR operation:  $5 \text{ (101)} \mid 3 \text{ (011)} = 111 \text{ (7)}$ )

**26. Which of the following is a bitwise operator in PHP?**

- A) `&`
- B) `|`
- C) `^`
- D) All of the above

**Answer:** D) All of the above

---

**27. What does the `^` (bitwise XOR) operator do?**

- A) Flips all bits
- B) Returns 1 if only one of the bits is 1
- C) Performs logical XOR
- D) None of the above

**Answer:** B) Returns 1 if only one of the bits is 1

---

**28. What will be the output of `echo 5 ^ 3;`?**

- A) 6
- B) 2
- C) 1
- D) 7

**Answer:** A) 6

\*(Bitwise XOR:  $5 \text{ (101)} \wedge 3 \text{ (011)} = 110 \text{ (6)}$ )

---

**29. Which operator is used for bitwise NOT in PHP?**

- A) !
- B) ~
- C) not
- D) -

**Answer:** B) ~

---

**30. What is the result of `echo ~5;`?**

- A) -6
- B) 4
- C) -5
- D) 6

**Answer:** A) -6

*(Bitwise NOT flips all bits and adds -1.)*

---

**31. What will be the output of `echo 8 << 1;`?**

- A) 16
- B) 4
- C) 8
- D) 0

**Answer:** A) 16

*(Left shift moves bits left by 1 position, doubling the value.)*

---

**32. What is the output of `echo 8 >> 1;`?**

- A) 4
- B) 8
- C) 16
- D) 0

**Answer:** A) 4

*(Right shift moves bits right by 1 position, halving the value.)*

---

**33. What will `echo 10 <=> 5;` return?**

- A) -1
- B) 0
- C) 1
- D) Error

**Answer:** C) 1

*(10 is greater than 5, so `<=>` (spaceship operator) returns 1.)*

---

**34. What will `echo 5 <=> 10;` return?**

- A) -1
- B) 0
- C) 1
- D) Error

**Answer:** A) -1

*(5 is less than 10, so `<=>` returns -1.)*

---

**35. What is the purpose of the `?.` (null safe) operator in PHP 8?**

- A) Checks if an object is null before calling a method
- B) Assigns null values
- C) Converts null to 0
- D) None of the above

**Answer:** A) Checks if an object is null before calling a method

---

**36. What will be the result of `echo null ?? "Default";`?**

- A) null
- B) Default
- C) Error
- D) Undefined

**Answer:** B) Default

*(?? (null coalescing) returns "Default" if null is present.)*

---

**37. What will `echo 5 == "5";` return?**

- A) true
- B) false
- C) Error
- D) Undefined

**Answer:** A) true

*(Loose comparison `==` ignores data type.)*

---

**38. What will `echo 5 === "5";` return?**

- A) true
- B) false
- C) Error
- D) Undefined

**Answer:** B) false

*(Strict comparison `===` checks data type.)*

---

**39. Which operator is used to concatenate strings in PHP?**

- A) +
- B) .
- C) &
- D) `concat()`

**Answer:** B) .

---

**40. What will be the output of `echo "Hello" . " World";`?**

- A) Hello World
- B) HelloWorld
- C) Error
- D) None

**Answer:** B) HelloWorld

---

**41. What will `echo "5" + 5;` return?**

- A) 55
- B) 10
- C) Error
- D) Undefined

**Answer:** B) 10

*(PHP automatically converts "5" to integer 5.)*

---

**42. Which operator is used for string repetition?**

- A) \*
- B) .
- C) `repeat()`
- D) None of the above

**Answer:** D) None of the above

*(PHP does not have a native repetition operator.)*

---

**43. What will be the result of `echo 10 ?? "Default";`?**

- A) 10
- B) Default
- C) NULL
- D) Error

**Answer:** A) 10

---

**44. Which operator is used for object cloning in PHP?**

- A) `clone`
- B) `new`
- C) `copy`
- D) `__clone()`

**Answer:** A) `clone`

---

**45. What will `echo "5" === 5; return?`**

- A) 1
- B) 0
- C) Error
- D) Undefined

**Answer:** B) 0

*(Strict comparison returns false.)*

---

**46. What will be the output of `echo "5" + "10";?`**

- A) 510
- B) 15
- C) Error
- D) Undefined

**Answer:** B) 15

*(PHP converts strings to integers when using +.)*

---

**47. What is the precedence of `&&` compared to `and`?**

- A) `&&` has higher precedence
- B) `and` has higher precedence

- C) Both are equal
- D) None of the above

**Answer:** A) && has higher precedence

---

**48. What will be the output of `echo true and false;?`**

- A) 1
- B) 0
- C) Error
- D) Undefined

**Answer:** A) 1

*(Because = has higher precedence than and.)*

---

**49. What will be the result of `echo false or true;?`**

- A) 1
- B) 0
- C) Error
- D) Undefined

**Answer:** B) 0

*(echo false executes first, ignoring or true.)*

---

**50. What is the correct syntax for using the ternary operator?**

- A) `condition ? true_value : false_value;`
- B) `condition : true_value ? false_value;`
- C) `true_value ? condition : false_value;`
- D) None of the above

**Answer:** A) `condition ? true_value : false_value;`

**1. What is operator precedence in PHP?**

- A) The order in which operators are evaluated
- B) The number of operands an operator can take
- C) The associativity of an operator
- D) The priority of functions

**Answer:** A) The order in which operators are evaluated

---

## 2. Which operator has the highest precedence in PHP?

- A) `()` (Parentheses)
- B) `++` (Increment)
- C) `*` (Multiplication)
- D) `=` (Assignment)

**Answer:** A) `()` (Parentheses)

---

## 3. What is the purpose of parentheses `()` in operator precedence?

- A) To change the natural order of evaluation
- B) To define a function
- C) To assign values
- D) To compare values

**Answer:** A) To change the natural order of evaluation

---

## 4. What will be the output of `echo 5 + 3 * 2;?`

- A) 16
- B) 11
- C) 13
- D) 10

**Answer:** B) 11

*(Multiplication has higher precedence than addition:  $5 + (3 * 2) = 5 + 6 = 11.$ )*

---

## 5. What will be the output of `echo (5 + 3) * 2;?`



- A) 16
- B) 11
- C) 13
- D) 10

**Answer:** A) 16

*(Parentheses change the order:  $(5 + 3) * 2 = 8 * 2 = 16$ .)*

---

**6. Which has higher precedence: `&&` or `and`?**

- A) `&&`
- B) `and`
- C) Both are the same
- D) Depends on the context

**Answer:** A) `&&`

**7. Which has higher precedence: `||` or `or`?**

- A) `||`
- B) `or`
- C) Both are the same
- D) Depends on the context

**Answer:** A) `||`

**8. What will be the output of `echo true && false || true`;**

- A) true
- B) false
- C) Error
- D) 1

**Answer:** A) true

*(Since `&&` has higher precedence than `||`, the expression is evaluated as  $(\text{true} \ \&\& \ \text{false}) \ || \ \text{true}$ , which results in  $\text{false} \ || \ \text{true} = \text{true}$ .)*

---

**9. What will be the output of `echo true and false;`?**

- A) true
- B) false
- C) 1
- D) Error

**Answer: C) 1**

*(Because echo has higher precedence than and, the expression is treated as (echo true) and false, so it prints 1 and does not evaluate and false.)*

---

**10. Which operator has the lowest precedence in PHP?**

- A) +
- B) =
- C) or
- D) .

**Answer: C) or**

**11. What will be the output of `echo 10 - 2 * 3;`?**

- A) 24
- B) 4
- C) 8
- D) 10

**Answer: B) 4**

*(Multiplication has higher precedence:  $10 - (2 * 3) = 10 - 6 = 4$ .)*

---

**12. Which has higher precedence: . (concatenation) or + (addition)?**

- A) .
- B) +
- C) Both have the same precedence
- D) Depends on the context

**Answer:** B) +

---

**13. What will be the output of `echo 5 . 2 + 3 ; ?`**

- A) 52 + 3
- B) 55
- C) 8
- D) 52

**Answer:** B) 55

*(Addition has higher precedence than concatenation: ("5" . (2 + 3)) = "5" . "5" = "55".)*

---

**14. Which has higher precedence: `==` or `&&`?**

- A) `==`
- B) `&&`
- C) Both are the same
- D) Depends on the context

**Answer:** A) `==`

---

**15. What is the output of `echo 5 > 3 && 2 < 4 ; ?`**

- A) true
- B) false
- C) 1
- D) 0

**Answer:** C) 1

---

**16. What is the associativity of the `=` operator?**

- A) Left to right
- B) Right to left
- C) No associativity
- D) Depends on the operands

**Answer:** B) Right to left

---

**17. What will be the output of `echo $x = 5 + 3 * 2;`?**

- A) 16
- B) 11
- C) 10
- D) Error

**Answer:** B) 11

*(Assignment = has lower precedence than arithmetic operations.)*

---

**18. Which operator has the lowest precedence among these?**

- A) +
- B) =
- C) and
- D) ||

**Answer:** C) and

---

**19. What will be the output of `echo 10 - 3 + 2;`?**

- A) 5
- B) 9
- C) 10
- D) 15

**Answer:** B) 9

*(Operators of the same precedence are evaluated left to right:  $(10 - 3) + 2 = 7 + 2 = 9$ .)*

---

**20. What is the associativity of . (concatenation) operator?**

- A) Left to right
- B) Right to left

- C) No associativity
- D) None of the above

**Answer:** A) Left to right

---

**21. What will be the output of `echo "Hello" . " World" . "!"` ;?**

- A) Hello World!
- B) HelloWorld!
- C) Error
- D) None

**Answer:** B) HelloWorld!

---

**22. Which operator has higher precedence: + or %?**

- A) +
- B) %
- C) Both are the same
- D) None of the above

**Answer:** B) %

---

**23. What will be the output of `echo (10 % 3) * 2` ;?**

- A) 1
- B) 2
- C) 4
- D) 6

**Answer:** C) 4

---

**24. What is the precedence of ++ (increment) operator?**

- A) Highest
- B) Lowest
- C) Medium
- D) Depends on the context

**Answer:** A) Highest

---

**25. What will be the output of `echo 10 > 5 ? "Yes" : "No";`?**

- A) Yes
- B) No
- C) Error
- D) None

**Answer:** A) Yes

---

**26. Which operator has lower precedence: `or` or `||`?**

- A) `or`
- B) `||`
- C) Both are the same
- D) Depends on context

**Answer:** A) `or`

---

**27. What is the associativity of `&&`?**

- A) Left to right
- B) Right to left
- C) No associativity
- D) None

**Answer:** A) Left to right

---

**28. Which has higher precedence: `*` or `/`?**

- A) `*`
- B) `/`
- C) Both are equal
- D) Depends on context

**Answer:** C) Both are equal

---

**29. Which of the following has the lowest precedence?**

- A) +
- B) .
- C) =
- D) or

**Answer:** D) or

---

**30. What will be the output of `echo (5 + 2) * 3 ; ?`**

- A) 21
- B) 17
- C) 15
- D) 23

**Answer:** A) 21