1: PHP: is a widely-used, open source scripting language. PHP scripts are executed on the server. PHP is free to download and use.

2: why we need php programming

> ❖ PHP can actually do anything related to server-side scripting.
> ❖ Large choice of available specialists ·
> ❖ PHP is that it is platform independent.
> ❖ can be used on Mac OS, Windows, Linux and supports most web sides.
> ❖ **It is used to enhance web pages**. With PHP, you can do things like create username and password etc.
> ❖ **Free to download and easy to use**.

3: last version of php

 PHP 8.1, released in 2021 released in 8 December.

4**: new A release** is the distribution of the final version or the newest version of a software application.

Static analysis, also called static code analysis, is a **method of computer program debugging.**

5: features of php

1. **Open source**: available on the internet for free.
2. **Popularit**y: php is at least the most popular open-source server-side scripting language.
3. **Performance**: php is typically the fastest server-side script language.
4. **Database connectivity**
5. **Platform independent**: php runs on various OS including **Linux,** UNIX, windows and **mac osx.** It also runs with major we servers including **apache** and **iis**

6: a letter is a-z, A-Z, and the bytes from 128 through 255 (0x80-0xff). Note: $this is a special variable that can't be assigned.

Ex: $ name: fafa(){

Call it $NAME (fafa) ;\ it can't work

}

7: **comment** in php code writing we use it in case use write something many time or u don't want that what u write to be read by machine you make it comment inside of delete it.

  Comment have two type: **one-line and multi-line comments**. A one-line comment starts with the # or // **. A multi-line comment starts with** /* and end with */ .

Ex: html{

<body>

//form action=" ",method="post "; ………// comment

<body>

Html

8:,

- echo has no return value while print has a return value of 1 so it can be used in expressions.

echo is marginally faster than print.

- **Print() printf()**: print is a construct, it returns TRUE on successful output and FALSE if there is no output. Printf() is a function, and not to be used as a construct. It allows string output to be formatted. It is the slowest medium to print the data out.
- **Printf() print-r():**The printf( ) function builds a formatted string by inserting values into a template. The print_r( ) function is useful for debugging—it prints the contents of arrays, objects, and other things, in a more-or-less human-readable form.
- **Print-r()var-dump**: The var_dump() function displays structured information about variables/expressions including its type and value.

9:                    **scalar**

- **String**: refers to a series of characters.
- **Integer**: An integer is a number without any decimal part.
- **Float**: A float is a number with a decimal point and can be extended to exponential form.
- **Boolean**: Can hold numbers containing fractional or decimal parts including positive and negative numbers or a number in exponential form

                    compound

- **Array**: is a special variable that we use to store or hold more than one value in a single variable without having to create more variables to store those values.
- **Object**: is an individual instance of the data structure defined by a class.

Special data type

- **NULL**: These are special types of variables that can hold only one value
- **Resource**: Resources in PHP are not an exact data type. These are basically used to store references to some function call or to external PHP resources.

10: **php variable:** are characters that stores value or information such as text or integers in your code.

- A variable starts with the $ sign, followed by the name of the variable
- A variable name must start with a letter or the underscore character
- A variable name cannot start with a number
- A variable name can only contain alpha-numeric characters and underscores (A-z, 0-9, and _)
- Variable names are case-sensitive ($age and $AGE are two different variables)

11: super goal variable

- $**GLOBALS**: is a PHP super global variable which is used to access global variables from anywhere in the PHP script (also from within functions or methods).
- $_**SERVER**: is a PHP super global variable which holds information about headers, paths, and script locations.
- $_REQUEST: is a PHP super global variable which is used to collect data after submitting an HTML form.
- **$_POST**: is a PHP super global variable which is used to collect form data after submitting an HTML form with method="post". $_POST is also widely used to pass variables.
- **$_GET**: is a PHP super global variable which is used to collect form data after submitting an HTML form with method="get".
- **$_FILES:** is an associative array containing items uploaded vie http post method
- **$_ENV:** it stores environment variable to current script.
- **$_COOKIE**: is used to retrieve a cookies value sent by the browser in the current request, keyed by cookie name.
- **$_SESSION:** is an associative array that contains all session variables.

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