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1. What is PHP?

Ans: PHP is a server side scripting language. It is also called a programming language now-a-days.

1. What PHP stands for?

Ans: PHP stands for Personal Home Page.

1. Why use include vs. require in PHP?

Ans: Both are used to insert a PHP file into another PHP file. If any error occurs, ‘include’ shows a warning and continue the execution of rest of the page. But ‘require’ shows a fatal error and stop the execution of rest of the page.

1. What is apache?

Ans: Apache is a open source web server.

1. What is the difference between xampp, wamp, mamp and lamp?

Ans: XAMPP = Cross (any operating system), Apache, MySQL, PHP, Perl, it supports on all operating system. Such as Windows, Linux, Mac etc.

WAMP = Windows, Apache, MySQL, PHP, it is for Windows.

MAMP = Mac, Apache, MySQL, PHP, it works on Mac.

LAMP = Linux, Apache, MySQL, PHP, it is for Linux.

1. PHP vs JS

Ans: PHP works on server side but JS works on client side.

1. Why use bootstrap?

Ans: We use Bootstrap to design a responsive website and to make our tasks faster.

1. What is PHP tag?

Ans: There are several PHP tags. But ‘<?php ?>’ tag is used mostly.

1. PHP runs with interpreter or compiler?

Ans: PHP runs with interpreter.

1. JSruns with interpreter or compiler?

Ans: JS runs with interpreter.

1. Can we save data in files or database with JS and PHP?

Ans: We can not save data in files or database with JS. But we can save data in files or database with PHP.

1. Is PHP a scripting language?

Ans: Yes, PHP is a scripting language. It is also called programming language now-a-days.

1. Is JS a scripting language?

Ans: Yes, JS is a scripting language. It is also called programming language now-a-days.

1. Is JS a programming language?

Ans: Yes, JS is a programming language.

1. ASP.NET vs. PHP which one is most popular?

Ans: ASP.NET is the most popular.

1. What is normalize or reset CSS?

Ans: HTML tags have different margin and padding on different browser. Normalize or Reset CSS makes the margin and padding same for all browsers.

1. Write PHP tag? And which you should use?

Ans: PHP tag: <?php ?>. This one should be used.

1. What is the best way to test your JS work?Write **why?**
   1. console.log()
   2. var divE = document.getElementById(“id”); divE.innerHTML = “hello”;
   3. alert()
   4. document.write()

Ans: a

1. What is the best way to display your JS work?Write **why?**
2. console.log()
3. var divE = document.getElementById(“id”); divE.innerHTML = “hello”;
4. alert()
5. document.write()

Ans: b

1. Write few line of code to initialize PHP variable hello = 5, abc = “what it is”; d = 3; what will be the result of abc + hello and hello + d. Use your syntax for your PHP language?

Ans: <?php

$hello = 5;

$abc = 'what it is';

$d = 3;

echo $abc+$hello; //output: 5

echo $hello + $d; //output: 8

?>

1. Write few line of code to initialize JS variable hello = 5, abc = “what it is”; d = 3; what will be the result of abc + hello and hello + d. Use your syntax for your js language?

Ans: <script type=”text/javascript”>

var hello = 5;

var abc = 'what it is';

var d = 3;

console.log(hello+abc); //output: 5what it is

console.log(hello+d); //output: 8

</script>

1. Evaluate this:
2. false && true || true Ans: true
3. false || true && true && false Ans: false
4. false || false && true && false || (true && false || false && (true && false || false))

Ans: false

1. if x = 44 then evl:
   * 1. x >2&& x <= 53 || (x +1) == 11 || true == x Ans: true
     2. (x \* 2 >= 20 && x < 21 ) || (x+5) < x Ans: false
2. What if-else is known as in any programming language?

Ans: if-else is known as conditional expression in any programming language.

1. What is the difference between switch and if-else? Write syntax for both JS and PHP?

Ans: switch works on a single value but if-else works on multiple conditions.

Syntax of switch for JS:

switch(expression) {  
    case n:  
        code block        break;  
    case n:  
        code block        break;  
    default:  
        default code block}

Syntax of if-else for JS:

if (*condition1*) {  
    block of code to be executed if condition1 is true} else if (*condition2*) {  
    block of code to be executed if the condition1 is false and condition2 is true  
} else {  
    block of code to be executed if the condition1 is false and condition2 is false}

Syntax of switch for PHP:

\*Same as JS.

Syntax of switch for PHP:

\*Same as JS.

1. Is it safe to use switch in JS?

Ans:

1. Why loops are used in any programming language?

Any: Loops are used in programming language to execute a block of code for multiple times.

1. Write PHPfor eachsyntax and explain howall for eachworks in PHP?

Ans:

foreach ($*array* as$*value*) {  
    *code to be executed;*  
}

or

foreach ($*array* as $key =>$*value*) {  
    *code to be executed;*  
}

1. Suppose you have an array in PHP

$arr = array (1, 2, 3, 4, 55);

// now if you want to change the values of the array to index as this

// array (0, 1, 2, 3, 4), how can you do this using loops?

1. Suppose you have an array in JS

var arr = [1,2,3,4,55];

// now if you want to change the values of the array to index as this

// arr = (0, 1, 2, 3, 4), how can you do this using loops?

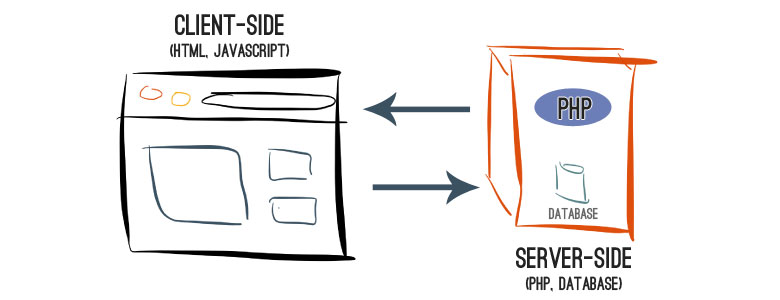
1. Which looping syntaxes are similar in JS and PHP?

Ans: ‘for’ loop and ‘while’ loop are similar in JS and PHP.

1. What is the appropriate indenting for JS and PHP?

Ans: One tab per level, The only correct way.

1. Which language is server side PHP or JS? What does it mean by server side and client side explain in details with **pictures**?

Ans: PHP is server side language. 

Client sends a request by url. The url is converted to an IP address. Then server responses to that request and send the requested data as plain text to the client’s browser.

1. Which are the number data types that **JS** can handle? What is the limit of it?

Ans: In JavaScript, there is no distinction between integer and floating-point values; a JavaScript number can be either Integer or Float.

1. List the data types in PHP and JS?

Ans:

PHP data types: String, Integer, Float (floating point numbers - also called double), Boolean, Array, Object, NULL, Resource.

JS data types: String, Number, Boolean, Array, Object

1. How can we convert an object to number in JS?

Ans: By using Number() method.

1. How everything is treated in JS ?

Ans: In JS, everything is treated as an Object.

1. JS treats variables as first-class citizen, what does it mean?

Ans: Because variables can hold functions in JS.

1. How to create an array in JS and PHP? What is the best way to declare an array in JS and which is the anti-pattern in JS to declare an array?

Ans: In JS: var array-name = [item1, item2, ...]; is the best way to declare an array in JS.

In PHP: $array-name = array();

1. Why global variables are considered unsafe in any language?

Ans: Because global variables can be modified from anywhere.

1. Does PHP variables are global, by default?

Ans: Yes.

1. Does JS variables are global, by default?

Ans: Yes.

1. How to write clean codes in all languages?

Ans:

 Keep programs and methods short and manageable.

 Use language-specific idioms.

 Use straightforward logic and flow-of-control.

 Avoid magic numbers (numbers other than -1, 0, 1, and 2); instead, give them meaningful symbolic names.

1. Naming convention in JS and PHP?

Ans: JavaScript Naming Conventions:

All JavaScript **variables** must be **identified** with **unique names.**

* Names can contain letters, digits, underscores, and dollar signs.
* Names must begin with a letter
* Names can also begin with $ and \_ (but we will not use it in this tutorial)
* Names are case sensitive (y and Y are different variables)
* Reserved words cannot be used as names

PHP Naming Conventions:

A variable can have a short name (like x and y) or a more descriptive name (age, carname, total\_volume).

Rules for PHP variables:

* 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)

Remember that JS and PHP variable names are case-sensitive!

1. What is the anti-pattern to declare a function in JS? What is the right pattern to declare a function and variable in JS?

Ans: Anti-patterns are certain patterns in software development that is considered a bad programming practice.

function foo(a, b) {

    function bar() {

        return a + b;

    }

    return bar();

}

foo(1, 2);

Right pattern for function:

function foo(a, b) {

    return bar(a, b);

}

function bar(a, b) {

    return a + b;

}

foo(1, 2);

Right pattern for variables:

function foo() {

var x = 1,

y = 2,

z = 3;

}

1. What is jQuery? Why use jQuery instead of other similar products ?

Ans: jQuery is JS library. There are lots of other JavaScript frameworks out there, but jQuery seems to be the most popular, and also the most extendable.

1. Let’s say you have 100 numbers in an array in both languages (JS and PHP), how can find the largest and the smallest number among those 100’s of numbers? Use appropriate syntax and clean code to write the program and when you done publish it on github.

Ans: https://github.com/shawon922/Assignment-6

1. Do you understand the difference between function and methods?

Ans: A function is a piece of code that is called by name. It can be passed data to operate on (ie. the parameters) and can optionally return data (the return value).

A method is a piece of code that is called by name that is associated with an object. In most respects it is identical to a function except for two key differences.

1. It is implicitly passed for the object for which it was called.
2. It is able to operate on data that is contained within the class (remembering that an object is an instance of a class - the class is the definition, the object is an instance of that data).
3. Do you understand what event means in JS ? Is there any events in PHP? Write with description?

Ans: When some specific tasks like click, page loading etc. are occured in JS, is called event. There is no events in PHP.

1. How you can reverse and array in JavaScript? How can you add an item to both JS and PHP? Write cleans codes and publish it on github.

Ans: https://github.com/shawon922/Assignment-6

1. Can you count how many classes that you have been absent?

Ans: Fortunately I’ve not been absent in any class.

1. Write the fundamentals of programing 101 in both JS and PHP and print it with this paper. Please use appropriate tags and html structure to fulfil it.
   1. Variables
   2. DataTypes
   3. Condition ( if , switch )
   4. Function
   5. Loops (for , while)
   6. Scope/Blocks : Variable Life Cycle.
   7. Nesting
   8. Comments