* Javascript and PHP are commonly used together to create websites. What is each programming language usually responsible for?

**JavaScript**is a lightweight, interpreted, object-oriented. It is a [prototype-based](https://en.wikipedia.org/wiki/Prototype-based_programming), multi-paradigm scripting language that is dynamic, and supports object-oriented, imperative, and functional programming styles.

JavaScript runs on the client side of the web, which can be used to design / program how the web pages behave on the occurrence of an event. JavaScript is an easy to learn and also powerful scripting language, widely used for controlling web page behavior.

**PHP** is a general-purpose scripting language that is especially suited to [server-side](https://en.wikipedia.org/wiki/Server-side_scripting) [web development](https://en.wikipedia.org/wiki/Web_development), in which case PHP generally runs on a [web server](https://en.wikipedia.org/wiki/Web_server). Any PHP code in a requested file is [executed](https://en.wikipedia.org/wiki/Execution_(computing)) by the PHP runtime, usually to create [dynamic web page](https://en.wikipedia.org/wiki/Dynamic_web_page) content or dynamic images used on websites or elsewhere.[[187]](https://en.wikipedia.org/wiki/PHP#cite_note-187) It can also be used for [command-line](https://en.wikipedia.org/wiki/Command-line) scripting and [client-side](https://en.wikipedia.org/wiki/Client-side) [graphical user interface](https://en.wikipedia.org/wiki/Graphical_user_interface) (GUI) applications. PHP can be deployed on most web servers, many [operating systems](https://en.wikipedia.org/wiki/Operating_system) and [platforms](https://en.wikipedia.org/wiki/Computing_platform), and can be used with many [relational database management systems](https://en.wikipedia.org/wiki/Relational_database_management_system) (RDBMS). Most [web hosting](https://en.wikipedia.org/wiki/Web_hosting) providers support PHP for use by their clients.

* HTML forms can be submitted using either "get" or "post". What is the difference between these two options? When would one be used and not the other?

**Get :** GET requests are re-executed but may not be re-submitted to server if the HTML is stored in the browser cache. Get is used to request data from a specified resource. GET method should not be used when sending passwords or other sensitive information.

**Post:** The browser usually alerts the user that [data](https://www.diffen.com/difference/Data_vs_Information) will need to be re-submitted. **POST is used to send data to a server to create/update a resource.** GET method should not be used when sending passwords or other sensitive information.

* What is the difference between a for loop and a while loop? When would one be used and not the other?

Loops are used to execute the same block of code again and again, as long as a certain condition is met. The basic idea behind a loop is to automate the repetitive tasks within a program to save the time and effort.

**While statement** will loops through a block of code as long as the condition specified in the while statement evaluate to true.

<?php $i = 1;

while($i <= 3)

{ $i++; echo "The number is " . $i . "<br>"; }

?>

For **loop** repeats a block of code as long as a certain condition is met. It is typically used to execute a block of code for certain number of times.

For(initialization; condition; increment){}

The parameters of for loop have following meanings:

Initialization — it is used to initialize the counter variables, and evaluated once unconditionally before the first execution of the body of the loop.

Condition — in the beginning of each iteration, condition is evaluated. If it evaluates to true, the loop continues and the nested statements are executed. If it evaluates to false, the execution of the loop ends.

Increment — it updates the loop counter with a new value. It is evaluate at the end of each iteration.

<?php

for($i=1; $i<=3; $i++)

{ echo "The number is " . $i . "<br>"; }

?>

* Give an example of data that would be best represented in PHP with a string, an integer, a double, and a boolean.

**String**

<? Php

$name=’hello’;

Echo “$name world”;

?>

**Integer**

<?php   
$x= 5985;  
var\_dump($x);  
?>

**Double**

<?php   
$x = 10.365;  
var\_dump($x);  
?>

**Boolean**

<?php

$a = true; $b = false;

var\_dump($a);

var\_dump($b);