**JavaScript**

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| --- | --- | --- | --- | --- |
| **Syntax** | **PHP** | | | **JavaScript** |
| **Variable** | **Start With $** | | | **Start With Let or Var** |
| **Print** | **echo() Or print()** | | | **console.log()** |
| **Concatenation** | **Concatenation .** | | | **Concatenation +** |
| **Comment Out** | **//single , /\* Multiple\*/** | | | **Same** |
| **Constant** | **define(“GREET”, “value”)** | | | **const GREET = “value”** |
| **Data Type** | **var\_dump(data);** | | | **console.log(typeof data)** |
| **Operators** | **Same** | | | **Same** |
| **String Position** | **strops(‘value’);** | | | **indexOf(‘value’);** |
| **Case** | **Strtoupper()**  **Strtolower()** | | | **.toUpperCase();**  **.toLowerCase();** |
| **Str to num** |  | **parseFloat(str); parseInt(str);** | | |
| **Num to Str** |  | **‘’+str;** | | |
| **Fixed Decimal** |  | **.toFixed(1);** | | |
| **Math** |  | **Math.abs(number); //Make Positive**  **Math.round(number); //Round Avg**  **Math.ceil(number); //Round Upper**  **Math.floor(number); //Round Lower**  **Math.random(); //Random Fraction**  **Math.max(v1, v2, v3) //Select Max value** | | |
| **Ternary** | **Print / console.log ($marks>=40) ? "pass" : "Fail";** | | | |
| **Array Functions** | | | | |
| **Array** | **Same** | | | **Same** |
| **Count Array** | count(array); | | | **array.length** |
| **Position** |  | | | **Array.indexOf(‘value’)** |
| **Add First** | **Array\_unshift(‘array, ‘value’)** | | | **array.unshift(‘value’)** |
| **Delete First** | **Array\_shift(‘array’)** | | | **array.shift()** |
| **Last Value** | **Array\_push(‘array, ‘value’)** | | | **array.push(‘value’)** |
| **Delete Last** | **Array\_pop(‘array’)** | | | **array.pop()** |
| **Slice** | **array\_slice(‘array’, start, stop)** | | | **array.slice(start,stop)** |
| **Const Array** | **Array value never be changed element may be changed** | | | |
| **Make Object** | | | | |
| **Object** |  | | **{key1:value1, key2:value2}** | |
| **Retrieve Object** |  | | **objname.key;** | |
| **Change / Add** |  | | **objname.key= ‘value’;** | |

**Syntax Difference Between PHP & JS:**

**variable in JavaScript:**

* Define by var:
  + Uses Anywhere.
  + Can be licked.
* Define by let:
  + Uses like var.
  + Cannot be licked.

**Editor for Run JS:**

* VS CODE:
  + Install code Runner in VS.
  + Ctrl + Alt + N to Get output of js.
* Chrome Dev Tools:
  + F12. (Write & Execute Code).
* Online Editor:
  + <https://jscomplete.com/playground>
  + https://codepen.io

**If Else && ||Conditions Together (PHP && JS):**

* Syntax:
  + if ($number>10 && ($number == 11 || $number == 12)){}

**Arrays in JavaScript:**

* Arrays:
  + **Array Indexing**: Positive From 0 & Negative Start From -1;
  + **Length**: array.length;
  + **Position**: indexOf(value);
  + **Add First**: array.unshift(value);
  + **Delete First**: array.shift();
  + **Add Last**: array.push(value);
  + **Delete Last**: array.pop();
  + **Slice An Array**: array.slice(start, stop);
  + **Splice An Array**: array.splice(start,stop);
  + **Add Two Or More Array**:
    - * + **array1.concat(array2, array3);**
        + **[].concat(array1, array2, array3);**

**Different Between Slice & Splice:**

* **Slice:** 
  + **Copy Element from Parent Array;**
  + **Operation Execute Right Before Last value;**
* **Splice:** 
  + **Cut Element from Parent Array;**
  + **Operation Execute to last value;**

**Use Debugger to stop code:**

* Debugger;

**DOM (Document Object Model):**

* **Dom**: Converts HTML document to JavaScript Object.