

## For and While Loops

These exercises are designed to help you understand more about for loops, try to do them without looking at the solution.

**Once you are done try to do the same exercises with a while loop**

- 1- Use a for loop to print "Hello world" 10 times.
- 2- Write a program that will print out the multiplication table of 6 from 0 to 20 (use a for loop)
- 3- Write a for loop to print the numbers from 0 to 10 in reverse order (10,9,8,7,6,5,4,3,2,1)
- 4- Use a for loop to print the sum of the number between 40 and 100.

5- Write a program to iterate through an array to find the greatest number. To do so use a temporary variable you can call it "max" (since it represents the greatest value of the array) and assign it the value stored in array[i] (with  $0 < i < \text{array.length}$ ) and comparing it to the next element of the array, if  $\text{max} < \text{array}[i]$  assign the value stored in array[i] to max.

Solution:

### For loops:

Exercise 1:

```
for(int i=0;i<10;i++){  
    console.log("hello world");  
}
```

Exercise 2:

```
for(int i=0;i<=20;i++){  
    var multiplication= 6*i;  
}
```

Exercise 3:

```
for(int i=10;i>=0;i--){  
    console.log(i);  
}
```

Exercise 4:

```
var sum=0;  
for(int i=40;i<=100;i++){  
    sum+=i;  
}
```

Exercise 5:

```
var array[23,12,56,34,2];  
var max=0;  
for(int i=0;i<array.length;i++){  
    if(max<array[i]){  
        max=array[i];  
    }  
}
```

## While loop:

Exercise 1:

```
var i=0;  
while(i<10){  
    console.log("hello world");  
    i++;  
}
```

Exercise 2:

```
var i=0;  
while(i<=20){  
    var multiplication= 6*i;  
    i++;  
}
```

Exercise 3:

```
var i=10;
while(i>=0){
    console.log(i);
    i--;
}
```

Exercise 4:

```
var i=40;
var sum=0;
while(i<=100){
    sum+=i;
    i++;
}
```

Exercise 5:

```
var array[23,12,56,34,2];
var max=0;
var i=0;
while(i<array.length){
    if(max<array[i]){
        max=array[i];
    }
    i++;
}
```