

## Lesson 5: Basic Javascript ( Week 3) Lab solutions

### 1) Find Max of Two

```
function max( x ,y){  
    var largest;  
    if(x>y){  
        largest=x;  
    }  
    else if(x<y){  
        largest=y;  
    }  
    return largest;  
}
```

//Testing:

```
console.log(max(3,1));
```

//output: 3

### 2) Find Max of Three Numbers

```
function maxOfThree(x,y,z){  
    var largeOfThree;  
    if(x>y)    {  
        largeOfThree=x;  
    }else{  
        largeOfThree=y;  
    }  
}
```

```
        if(z>largeOfThree){
            largeOfThree=z;
        }
        return largeOfThree;

    }

    // Testing:
    console.log(maxOfThree([6,3,1]));
    //output: 6
```

### 3) Check vowel

```
function isVowel(ch){
    var checkVowel=false;
    if(ch=='a' || ch=='A' || ch=='e'
    || ch=='E' || ch=='i' || ch=='I' || ch=='o' || ch=='O' || ch=='u' || ch=='U'){
        checkVowel=true;
    }
    return checkVowel;
}

// Testing:
console.log(isVowel('A'));
//output: true
```

#### 4) Sum Array of Numbers

```
function sum(arr){  
    let sum=0;  
    for(let i=0;i<arr.length;i++){  
        sum+=arr[i];  
    }  
    return sum;  
  
}  
  
// Testing:  
console.log(sum[1,2,3,4]);  
//output: 10
```

#### 5) Multiply Array of Numbers

```
function multiply(arr){  
    let mult=1;  
    for(let i=0;i<arr.length;i++){  
        mult=mult*arr[i];  
    }  
    return mult;  
  
}  
  
// Testing:  
console.log(multiply[1,2,3,4]);  
//output: 24
```

## 6) Reverse String

```
function reverse(str){  
    let reversed="";  
    for(let i=str.length-1;i>=0;i--){  
        reversed=reversed+str.charAt(i);  
    }  
    return reversed;  
}
```

// Testing:

```
console.log(reverse("Hello"));
```

//output: "olleH"

## 7) Find Longest Word from an array of Strings

```
function findLongestWord(array){  
    var longest=array[0].length;  
    for(let i=1;i<array.length;i++){  
        if(array[i].length>longest){  
            longest=array[i].length;  
        }  
    }  
    return longest;  
}
```

// Testing:

```
console.log(findLongestWord(["ab" "cde", ""efghi"]));
```

//output: "efghi"

### 8) Find Longer then n from array of String

```
function filterLongWords(array,iVal){
    let longArrays=[];
    for(let i=0;i<array.length;i++){
        if(array[i].length>iVal){
            longArrays.push(array[i]);
        }
    }
    return longArrays;
}

// Testing:
console.log(filterLongWords(["ab","cd","abcd"],3));
// output: ["abcd"]
```

## 9) Array Manipulation

### a) Multiply by 10

```
function multiplyByTen(array){  
    const a=array.map(function(elem){  
        return elem*10;  
    });  
}
```

// Testing:

```
console.log( multiplyByTen([1,2,3,4]));
```

//output: [10,20,30,40]

### b) Get all Elements with value =3

```
function getAllElementEqual2Three(array){  
    const ThreesArray=[];  
    array.forEach(function(elem){  
        if(elem==3){  
            ThreesArray.push(elem);  
        }  
    });  
    console.log(ThreesArray);  
}
```

// Testing:

```
console.log(getAllElementEqual2Three([2,3,2,3]));
```

//output: [3,3]

### c) Get Product of the array elements

```
function getProductOfAllElements(array){  
    const product=array.reduce(getProduct,1);  
    return product;  
  
}  
  
function getProduct(val1,val2){  
    return val1*val2;  
}  
  
// Testing:  
console.log(getProductOfAllElements[1,2,3,4]);  
// output: 24
```

All the functions are in this single JS file.

--- Thanks -----

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