

THA Day 6

1. Write a JavaScript function to check whether an `input` is an array or not
Test Data :

Example:

```
console.log(is_array('w3resource'));  
console.log(is_array([1, 2, 4, 0]));  
False  
True
```

CODE:

```
function isArray(input)  
{  
    if(toString.call(input)=== "[object Array]"){  
        return true;  
    }  
    return false;  
}  
console.log(isArray([1,2,3]))  
console.log(isArray("hi"))
```

Function checkArray()

2. Write a JavaScript function to clone an array
Test Data :
console.log(array_Clone([1, 2, 4, 0]));
console.log(array_Clone([1, 2, [4, 0]]));
[1, 2, 4, 0]
[1, 2, [4, 0]]

CODE:

WAY 1:

```
function array_Clone(numbers){  
    newvalue=numbers.slice(0);  
    return newvalue  
}  
  
console.log(array_Clone([1, 2, 4, 0]));  
console.log(array_Clone([1, 2, [4, 0]]));
```

WAY 2:

```
function array_Clone(numbers){
    newvalue=[
        for (i = 0; i < numbers.length; i++) {
            newvalue[i] = numbers[i];
        }
    ]
    return newvalue
}

console.log(array_Clone([1, 2, 4, 0]));
console.log(array_Clone([1, 2, [4, 0]]));
```

3. Write a JavaScript function to get the first element of an array. Passing a parameter 'n' will return the first 'n' elements of the array.

Test Data :

```
console.log(first([7, 9, 0, -2]));
console.log(first([],3));
console.log(first([7, 9, 0, -2],3));
console.log(first([7, 9, 0, -2],6));
console.log(first([7, 9, 0, -2],-3));
```

Expected Output :

```
7
[]
[7, 9, 0]
[7, 9, 0, -2]
[]
```

CODE:

```
function first(array, n){
    if (array == null)
        return void 0;
    if (n == null)
        return array[0];
    if (n < 0)
        return [];
    return array.slice(0, n);
};

console.log(first([7, 9, 0, -2]));
console.log(first([],3));
console.log(first([7, 9, 0, -2],3));
console.log(first([7, 9, 0, -2],6));
console.log(first([7, 9, 0, -2],-3));
```

4. Write a simple JavaScript program to join all elements of the following array into a string.

Sample array : myColor = ["Red", "Green", "White", "Black"];

Expected Output :

"Red,Green,White,Black"

"Red,Green,White,Black"

"Red+Green+White+Black"

Code:

```
myColor = ["Red", "Green", "White", "Black"];
console.log(myColor.toString());
console.log(myColor.join());
console.log(myColor.join('+'));
```

5. Write a JavaScript program to find the most frequent item of an array

Sample array : var arr1=[3, 'a', 'a', 'a', 2, 3, 'a', 3, 'a', 2, 4, 9, 3];

Sample Output : a (5 times)

CODE:

```
var arr1=[3, 'a', 'a', 'a', 2, 3, 'a', 3, 'a', 2, 4, 9, 3];
var mf = 1;
var m = 0;
var item;
for (var i=0; i<arr1.length; i++)
{
    for (var j=i; j<arr1.length; j++)
    {
        if (arr1[i] == arr1[j])
            m++;
        if (mf<m)
        {
            mf=m;
            item = arr1[i];
        }
    }
    m=0;
}
console.log(item+" ( " +mf +" times ) " );
```