TASK - 3

Q.Print odd numbers in an array

Ans. Anonymous function

```
const arr = [1, 2, 3, 4, 5, 6];

var result = function (value)
{
  for(i=0; i<value.length; i++)
  {
     if(value[i]%2 !== 0)
     {
        console.log(value[i]);
     }
  }
}
result(arr);
// iife(immediately invoked function expression)
(function (arr){
   for(i=0; i<arr.length; i++)
   {
   if(arr[i]%2 === 0)
   {
      console.log(arr[i]);
   }
   }

})([1,2,3,4]);
```

Q.Convert all the strings to title caps in a string array

Ans. Anonymous function

```
var result = function (string)
{
   var sentence = string.toLowerCase().split(" ");
   for(var i =0; i<sentence.length; i++)
   {
      sentence[i] = sentence[i][0].toUpperCase() + sentence[i].slice(1);
   }
      console.log(sentence);
}
```

```
result("this is nice");

//iife
(function (string)
{
    var sentence = string.toLowerCase().split(" ");
    for(var i =0; i<sentence.length; i++)
    {
        sentence[i] = sentence[i][0].toUpperCase() + sentence[i].slice(1);
    }
        console.log(sentence);
})("this is nice");
```

Q.Sum of all numbers in an array

Ans. Anonymous function

```
const arr = [1, 2, 3, 4, 5, 6];
let sum = 0;
var result = function (value)
{

  for(i=0; i<value.length; i++)
  {
      sum += value[i];
  }
  console.log(sum);

}
result(arr);

//iife
let sum = 0;
(function (value)
{

  for(i=0; i<value.length; i++)
  {
      sum += value[i];
  }
```

```
    console.log(sum);

})( [1, 2, 3, 4, 5, 6]);
```

Q.Return all the prime numbers in an array

Ans. Anonymous function

```
var a = [1,2,3,4,5,6,7];
var prime = function (arr){
    let s = [],count=0;
    for(i=0; i<arr.length; i++)
    {
        for(j=1;j<=arr[i];j++)
        {
            if(arr[i]%j === 0)
            {
                count++;
            }

        }
        if(count === 2)
            s.push(arr[i])
            count = 0;

    }
     return s;
}
console.log(prime(a));

//iife
(function (arr){
    let s = [],count=0;
    for(i=0; i<arr.length; i++)
    {
        for(j=1;j<=arr[i];j++)
        {
            if(arr[i]%j === 0)
            {
                count++;
            }
```

```
        }
        if(count === 2)
            console.log(arr[i]);
            count = 0;

    }

})([1,2,3,4,5,6,7]);
```

Q.Return all the palindromes in an array
Ans. Anonymous function

```
var palindrome = function(array){
    var str = "";
    var rev = "";
    for(var i in array)
    {
        rev = array[i].split("").reverse().join("");
        if(rev === array[i])
        {
            str = str + "" + array[i];
        }
    }
    console.log(str);
}
palindrome(["hello","madam"]);

//iife
(function(array){
    var str = "";
    var rev = "";
    for(var i in array)
    {
        rev = array[i].split("").reverse().join("");
        if(rev === array[i])
        {
            str = str + "" + array[i];
        }
    }
```

```
    console.log(str);
})(["hello","madam"]);
```

Q.Return median of two sorted arrays of same size
Ans. Anonymous function

```
var array1 = [1,2,3];
var array2 = [4,5,6];
var array3 = (array1.concat(array2));

var result = function(array3)
{
var median = array3.length / 2;
console.log(median);
}
result(array3);

//iife
var array1 = [1,2,3];
var array2 = [4,5,6];
var array3 = (array1.concat(array2));

(function(array3)
{
var median = array3.length / 2;
console.log(median);
})(array3);
```

Q.Remove duplicates from a array
Ans. Anonymous function

```
const names = ["Mike","Matt","Nancy","Adam","Jenny","Nancy","Carl"];
var result = function (names)
{
let unique = [...new Set(names)];
console.log(unique);
}
result(names);

//iife
const names = ["Mike","Matt","Nancy","Adam","Jenny","Nancy","Carl"];
```

```
(function (names)
{
let unique = [...new Set(names)];
console.log(unique);
})(names);
```

Q.Rotate an array by k times and return the rotated array
Ans. Anonymous function

```
var nums = [1,2,3,4,5];
var k = 2;

var rotate = function (nums,k)
{
   let i =0;
   while(i<k)
   {

      nums.unshift(nums.pop());
      i++;
   }
   console.log(nums)

}
rotate(nums,k);

//iife
var nums = [1,2,3,4,5];
var k = 2;

(function (nums,k)
{
   let i =0;
   while(i<k)
   {

      nums.unshift(nums.pop());
      i++;
   }
   console.log(nums)
```

```
})(nums,k);
```