

### TASK 3

1).Print odd numbers in an array.

Anonymous function

```
var arr=[2,3,4,5,6,7,8,9];
var result=function(arr) {
    for(var i=0;i<arr.length;i++){
        if(arr[i]%2!=0)
            console.log(arr[i]);
    }
}
result(arr);
```

IIFE function

```
var arr=[2,3,4,5,6,7,8,9];
var result=function(arr) {
    for(var i=0;i<arr.length;i++){
        if(arr[i]%2!=0)
            console.log(arr[i]);
    }
}
result(arr);
```

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

Anonymous function

```
var arr=['hello zeN','Hii','gUvi'];
arr=arr.map(function(e) {
    return e.toLowerCase();
});

var result=function(arr) {
    for(var i in arr){
        arr[i]=arr[i].charAt(0).toUpperCase()+arr[i].slice(1);
        console.log(arr[i]);
    }
}
result(arr);
```

IIFE function

```
var arr=['hello zeN','Hii','gUvi'];
arr=arr.map(function(e) {
    return e.toLowerCase();
});
```

```

});

(function(arr) {
    for (var i in arr) {
        arr[i] = arr[i].charAt(0).toUpperCase() + arr[i].slice(1);
        console.log(arr[i]);
    }
})(arr);

```

### 3). Sum of all numbers in an array

#### Anonymous function

```

var arr = [2, 3, 4, 5, 6, 7, 8, 9, 10, 1];
var sum = 0;
var result = function(a) {
    for (var i in a) {
        sum += a[i];
    }
    console.log(sum);
}
result(arr);

```

#### IIFE function

```

var arr = [2, 3, 4, 5, 6, 7, 8, 9, 10, 1];
var sum = 0;
(function(a) {
    for (var i in a) {
        sum += a[i];
    }
    console.log(sum);
})(arr);

```

### 4). Return all the prime numbers in an array.

#### Anonymous function

```

var arr = [2, 3, 4, 5, 6, 7, 8, 9];
var result = function(a) {
    for (var i in a) {
        var c = 0;
        for (var j = 2; j <= a[i]; j++) {
            if (a[i] % j == 0)
                c++;
        }
    }
}

```

```

        if(c==1)
            console.log(a[i]);

    }
}
result(arr);

```

#### IIFE function

```

(function(a) {
    for(var i in a){
        var c=0;
        for(var j=2;j<=a[i];j++){
            if(a[i]%j==0)
                c++;
        }
        if(c==1)
            console.log(a[i]);
    }
})([2,3,4,5,6,7,8,9,11]);

```

#### 5).Return all the palindromes in an array.

##### Anonymous function

```

var arr=['1221','1213','aba','drfg'];
var result=function(a) {
    for(var i in a){
        var n=a[i].length-1;
        var c=0;
        for(var j=0;j<=(a[i].length-1)/2;j++){
            if(a[i][j]!=a[i][n--])
                c=1;
        }
        if(c==0)
            console.log(a[i]);
    }
}
result(arr);

```

#### IIFE function

```

var arr=['1221','1213','aba','drfg'];

```

```

(function(a) {
  for(var i in a){
    var n=a[i].length-1;
    var c=0;
    for(var j=0;j<=(a[i].length-1)/2;j++){
      if(a[i][j]!=a[i][n--])
        c=1;
    }
    if(c==0)
      console.log(a[i]);
  }
})(arr);

```

6).Return median of two sorted arrays of the same size.

Anonymous function

```

var arr=[2,3,4,5,6,7,8];
var arr1=[3,4,5,6,7,8,9];
var result=function(arr,arr1){
  var newarray=arr.concat(arr1);
  newarray=newarray.sort((a,b)=>a-b);
  var median;
  //since length will be even
  median=(newarray[(newarray.length)/2]+newarray[(newarray.length/2)-1])/2;
  console.log(median);
}
result(arr,arr1);

```

IIFE function

```

var arr=[2,3,4,5,6,7,8];
var arr1=[3,4,5,6,7,8,9];
(function(arr,arr1){
  var newarray=arr.concat(arr1);
  newarray=newarray.sort((a,b)=>a-b);
  var median;
  //since length will be even
  median=(newarray[(newarray.length)/2]+newarray[(newarray.length/2)-1])/2;
  console.log(median);
})(arr,arr1);

```

7).Remove duplicates from an array.

Anonymous function

```
var a=[2,3,3,4,5,5,6,6,7,77,7,8,99,9];
var result=function(a){
    a=a.sort((a,b)=>a-b);
    var res=[];
    for(var i=0;i<a.length-1;i++){
        if(a[i]!==a[i+1])
            res.push(a[i]);
    }
    res.push(a[a.length-1]);
    for(var i in res)
        console.log(res[i]);
}
result(a);
```

IIFE function

```
var a=[2,3,3,4,5,5,6,6,7,77,7,8,99,9];
(function(a){
    a=a.sort((a,b)=>a-b);
    var res=[];
    for(var i=0;i<a.length-1;i++){
        if(a[i]!==a[i+1])
            res.push(a[i]);
    }
    res.push(a[a.length-1]);
    for(var i in res)
        console.log(res[i]);
})([2,3,4,5,6,5,6,5,45,3,45,6,7,7,8,1]);
```

8).Rotate an array by k times and return the rotated array.

Anonymous function

```
var a=[2,3,4,5,6,7,8,9];
var k=5;
var result=function(a,k){
    var t=[];
    for(var i=0;i<a.length;i++)
```

```
    t[(i+k)%a.length]=a[i];  
    for(var i in t)  
        console.log(t[i]);  
}  
result(a,k);
```

### IIFE function

```
var a=[2,3,4,5,6,7,8,9];  
var k=5;  
(function(a,k){  
    var t=[];  
    for(var i=0;i<a.length;i++)  
        t[(i+k)%a.length]=a[i];  
    for(var i in t)  
        console.log(t[i]);  
})(a,k);
```