JavaScript: Task 3

Print odd Numbers in an array?

Anonymous function:

```
var odd=function (arr) {
   odd='';
   for(let i=0;i<arr.length;i++)
   {
   if(arr[i]%2!==0)
   {
      odd=odd+arr[i]+" ";
   }
   }
   console.log(odd)
}
arr=[1,2,3];
odd(arr);
```

IIFE:

```
(function (arr) {
   odd='';
   for(let i=0;i<arr.length;i++)
   {
   if(arr[i]%2!==0)
   {
      odd=odd+arr[i]+" ";
   }
   }
   console.log(odd)
})([1,2,3])
```

Convert all the strings to title caps in string array

Anonymous function:

```
var capitalize=function (arr) {
   for(let i=0;i<arr.length;i++)
   {
      let a=arr[i];
      a=a.split('');
      b=a[0].toUpperCase();
      a=b+','+a.slice(1);
      a=a.split(',');
      let c='';
      for(let i=0;i<a.length;i++)
      {
         c=c+a[i];
      }
      console.log(c)
   }
}
arr=['tej','raj'];
capitalize(arr);
```

IIFE:

```
(function (arr) {
   for(let i=0;i<arr.length;i++)
   {
      let a=arr[i];
      a=a.split('');
      b=a[0].toUpperCase();
      a=b+','+a.slice(1);
      a=a.split(',');
      let c='';
      for(let i=0;i<a.length;i++)
      {
         c=c+a[i];
      }
      console.log(c)
   }
})(['tej','raj'])
```

Sum of all the numbers in the array:

Anonymous function:

```
var sum=function (arr) {
    var sum=0;
    for(let i=0;i<arr.length;i++)
    {
      sum=sum+arr[i];
    }
    console.log(sum)
}
arr=[1,2,3];
sum(arr);
```

IIFE:

```
(function (arr) {
    var sum=0;
    for(let i=0;i<arr.length;i++)
    {
      sum=sum+arr[i];
    }
    console.log(sum)
})([1,2,3])
```

Return all the prime numbers in an array

Anonymous function:

```
var prime = function (input) {
    var num = [];
    for (var i in input) {
        var count = 0;
        for (var j = 2; j<=input[i]; j++) {
            if (input[i] % j === 0) {
                count = count + 1;
            }
        }
        if (count === 1) {
            num.push(input[i]);
        }
    }
   return console.log(num)
}
prime([1,2,3,4,5,6,7,8,9,10]);
```

IIFE:

```
(function (input) {
    var num = [];
    for (var i in input) {
        var count = 0;
        for (var j = 2; j<=input[i]; j++) {
            if (input[i] % j === 0) {
                count = count + 1;
            }
        }
        if (count === 1) {
            num.push(input[i]);
        }
    }
   return console.log(num)
})([1,2,3,4,5,6,7,8,9,10])
```

Return all the palindromes in an array

Anonymous function:

```
var palindrome=function (arr) {
    for(let i=0;i<arr.length;i++)
    {
        let a=arr[i];
        let c='';
        let d='';
        for(let i=0;i<a.length;i++)
        {
            c=c+a[i];
        }
        for(let i=c.length-1;i>=0;i--)
        {
            d=d+c[i];
        }
        if(c===d)
        {
                console.log(c)
        }
    }
}
arr=['tej','rar'];
palindrome(arr);
```

IIFE:

```
(function (arr) {
    for(let i=0;i<arr.length;i++)
    {
        let a=arr[i];
        let c='';
        let d='';
        for(let i=0;i<a.length;i++)
        {
            c=c+a[i];
        }
        for(let i=c.length-1;i>=0;i--)
        {
            d=d+c[i];
        }
        if(c===d)
        {
                console.log(c)
        }
    }
})(['tej','rar'])
```

Return median of two sorted arrays of same size

Anonymous function:

```
var median=function (arr1,arr2) {
    var arr;
    arr=arr1+","+arr2;
    arr=arr.split(",")
    arr=arr.sort();
    len=arr.length/2;
    med=(+arr[len-1]+ +arr[len])/2;
    console.log(med);
}
arr1=[1,2,3,6];
arr2=[4,5,8,7];
median(arr1,arr2);
```

IIFE:

```
(function (arr1,arr2) {
    var arr;
    arr=arr1+","+arr2;
    arr=arr.split(",")
    arr=arr.sort();
    len=arr.length/2;
    med=(+arr[len-1]+ +arr[len])/2;
    console.log(med);
})([1,2,3,6],[4,5,8,7])
```

Remove duplicates from an array :

Anonymous function:

```
var arr = [1,2,8,3,6,1,2,6];
let uniqueArr = [];
var duplicates = function(){
   for(let i of arr) {
      if(uniqueArr.indexOf(i) === -1) {
         uniqueArr.push(i);
      }
   }
   console.log(uniqueArr);

}
duplicates(arr);
```

IIFE:

```
(function(){
   let uniqueArr = [];
   for(let i of arr) {
      if(uniqueArr.indexOf(i) === -1) {
         uniqueArr.push(i);
      }
   }
   console.log(uniqueArr);
})([1,2,8,3,6,1,2,6])
```

Rotate an array by k times and return the rotated array

Anonymous function:

```
var rotate = function(num, k) {
    for (let i = 0; i < k; i++) {
        num.unshift(num.pop());
    }
    return num;
};
console.log(rotate([1,2,3,4,5], 2));
```

IIFE:

```
(function(num, k) {
    for (let i = 0; i < k; i++) {
        num.unshift(num.pop());
    }
    return num;
})([1,2,3,4,5], 2)
```