1.Do the below programs in anonymous function & IIFE

A:Print odd numbers in an array

CODE:

```
(function () {
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
var sum=0;
for (var i = 0; i <=10; i++) {
if(numsArr[i]%2!==0)
console.log(numsArr[i])
}
})();
```

Output:

1

3

5

7

9

11

B.Convert all the strings to title caps

CODE:

```
(function (str) {
  a= str.toLowerCase().split(' ').map(function(word) {
    return (word.charAt(0).toUpperCase() + word.slice(1));
  }).join(' ');
  console.log(a);
})("converting string to titlecase");
```

OUTPUT:

Converting String To Titlecase

C:Sum of all numbers in an array

Code:

```
(function () {
  var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
var sum=0;
for (var i = 0; i <=10; i++) {
sum += numsArr[i];
}
console.log(sum);

})();
```

Output:

66

D.Return all the prime numbers in an array

CODE:

```
(function (){var numArray = [2, 3, 4, 5, 6, 7, 8, 9, 10]

numArray = numArray.filter((number) => {
  for (var i = 2; i <= Math.sqrt(number); i++) {
    if (number % i === 0) return false;
  }
```

```
  return true;
});

console.log(numArray)})();
```

OUTPUT:

[2, 3, 5, 7]

E.Return all the palindromes in an array

CODE:

```
(function () {var arr = ['red', 'malayalam', 12321, 'did', 'naveen'];
const isPalindrome = el => {
  const str = String(el);
  let i = 0;
  let j = str.length - 1;
  while(i < j) {
    if(str[i] === str[j]) {
      i++;
      j--;
    }
    else {
      return false;
    }
  }
  return true;
};
const findPalindrome = arr => {
  return arr.filter(el => isPalindrome(el));
};
```

```
console.log(findPalindrome(arr))})();
```

OUTPUT:

```
[ 'malayalam', 12321, 'did' ]
```

F.Remove duplicates in an array:

CODE:

```
(function () {var removeDuplicates= (arr, n)=>
{

   if (n==0 || n==1)
      return n;

   var temp = new Array(n);



   var j = 0;
   for (var i=0; i<n-1; i++)



      if (arr[i] != arr[i+1])
         temp[j++] = arr[i];



   temp[j++] = arr[n-1];
```

```
    for (var i=0; i<j; i++)
        arr[i] = temp[i];

    return j;
}

var arr = [1, 2, 2, 3, 4, 4, 4, 5, 5];
    var n = arr.length;

    n = removeDuplicates(arr, n);

    for (var i=0; i<n; i++)
      console.log( arr[i]);})();
```

OUTPUT:

1

2

3

4

5

2.WARM-UP PROBLEMS:

A.Write a function called “addFive”.

Given a number, “addFive” returns 5 added to that number.

CODE:

```
var num = 10;
function addFive(num) {
```

```
return num+5;
}
var result = addFive(num)

console.log(result)
```

OUTPUT:

15

B:Fill in your code that takes an number minutes and converts it to seconds.

```
var min = 5;
function toSeconds(min) {
   return min*60;
}
var secs = toSeconds(min);

console.log(secs)
```

OUTPUT:

300

C:Create a function that takes a string and returns it as an integer.

CODE:

```
var mystr = "5";
function toInteger(mystr) {
   return parseInt(mystr);
}
```

```
var myint = toInteger(mystr)
console.log(myint)
console.log(typeof (myint))
```

OUTPUT:

5

number

D:

CODE:

```
function getFullName(firstName, lastName){
return `${firstName} ${lastName}`
}
console.log(getFullName("GUVI","Geek"));
```

OUTPUT:

GUVI Geek

3.Do the below programs in arrow functions

A.Print odd numbers in an array

CODE:

```
let numberF= () => {
var numsArr = [ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11];
var sum=0;
for (var i = 0; i <=10; i++) {
```

```
if(numsArr[i]%2!==0)
console.log(numsArr[i])
}
};
numberF();
```

OUTPUT:

1

3

5

7

9

11

B.Convert all the strings to title caps

CODE:

```
let fun = (str) =>  {
  a= str.toLowerCase().split(' ').map(function(word) {
    return (word.charAt(0).toUpperCase() + word.slice(1));
  }).join(' ');
  console.log(a);
};

fun("converting string to titlecase");
```

OUTPUT:

Converting String To Titlecase

C:Sum of all numbers in an array

CODE:

```
let fun = (arr) => {

var sum=0;
for (var i = 0; i <=10; i++) {
sum += arr[i];
}
console.log(sum);

};

fun([ 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11]);
```

Output:

66

D.Return all the prime numbers in an array

CODE:

```
let fun = () => {var numArray = [2, 3, 4, 5, 6, 7, 8, 9, 10]

numArray = numArray.filter((number) => {
  for (var i = 2; i <= Math.sqrt(number); i++) {
    if (number % i === 0) return false;
  }
  return true;
});

console.log(numArray);
}
```

```
fun();
```

OUTPUT:

```
[ 2, 3, 5, 7 ]
```

E.Return all the palindromes in an array

CODE:

```
var arr = ['red', 'malayalam', 12321, 'did', 'naveen'];
let isPalindrome = (el) => {
  const str = String(el);
  let i = 0;
  let j = str.length - 1;
  while(i < j) {
    if(str[i] === str[j]) {
      i++;
      j--;
    }
    else {
      return false;
    }
  }
  return true;
};
let findPalindrome = arr => {
  return arr.filter(el => isPalindrome(el));
```

```
};
console.log(findPalindrome(arr));
```

OUTPUT:

```
[ 'malayalam', 12321, 'did' ]
```