

1) Do the below programs in arrow functions

Print odd numbers in an array

```
var arr = [ 5, 6, 8 , 9, 11 ] ;  
var oddArray = arr.filter(x => {return (x%2 !== 0)});  
console.log(oddArray);
```

Convert all the strings to title caps in a string array

```
var str = ["aff", "duff", "taff", "off"];  
function conv(s)  
{  
    var a = s.split("");  
    a[0] = a[0].toUpperCase();  
    var finala = a.join("");  
    return finala;  
}  
var result = str.map(conv);  
console.log(result);
```

Sum of all numbers in an array

```
var a = [1, 2, 7, 8];  
var tSum = a.reduce((s,x) => (s+=x), 0);  
console.log(tSum);
```

Return all the prime numbers in an array

```
var arr = [ 5, 6, 8 , 9, 11 ] ;  
var priArray = arr.filter(x => { for(var i = 0; i < x/2; i++) { if(x%i !== 0) { return x; } } });  
console.log(priArray);
```

Return all the palindromes in an array

```
var du = ["malayalam", "fun", "dad"];  
function isPalindrome(x) { var a = x.split(""); if(a = a.reverse()) { return true; } }  
var palindromes = du.filter(isPalindrome);  
console.log(palindromes);
```

2) Rest Countries api task using array methods:

```
var asian = rc.filter(x => { return(x.region == "Asia")});  
console.log(asian);
```

```
var leastPopulated = rc.filter(x => { return(x.population < 200000 )});  
console.log(leastPopulated);
```

```
var bumpUp = rc.map(x => (x.population + 100000));
```

```
var capitalizedNames = rc.map(x => (x.name.toUpperCase()));
```

```
var totalPopulation = rc.reduce( (s, x) => (s = s + x.population) , 0);
```

```
var asian = rc.filter(x => { return(x.region == "Asia")});  
var totalAsianPopulation = asian.reduce( (s, x) => (s = s + x.population) , 0);
```

3) OOPS TASKS

Class 0: Write a calculator

```
class calc  
{  
  constructor(n1, n2){  
    this.n1 = n1;  
    this.n2 = n2;  
  }  
  add() { return (this.n1 + this.n2); }  
  sub() { return (this.n1 - this.n2); }  
  mul() { return (this.n1 * this.n2); }  
}
```

Class 1: Movie Basics

```
class Movie {  
  constructor(title, studio, rating){  
    this.title = title;  
    this.studio = studio;  
    this.rat = typeof rating.rat !== 'undefined' ? options.rat : 'PG';  
  }  
  getPG(arr) { var new = arr.filter(x => (x.this.rating = 'PG') ) }  
  
}
```

```
var fun = Movie('Casino Royale', 'Eon Productions', 'PG13');
```

Class 2: Circle class diagram

```
class circle{  
  constructor(radius, color){  
    this.rad =typeof radius.rad !== 'undefined' ? options.rad : 1.0;  
    this.col = typeof color.col !== 'undefined' ? options.col : 'red';  
  }  
  get Radius() {  
    return this.rad;  
  }  
  getColor() {  
    return this.col;  
  }  
  getArea(){  
    return (3.14 * this.rad * this.rad);  
  }  
}
```