# Assignment3

# One

```
class Circle
{
    radious:number;
    PI:number=3.14;
    constructor(r:number)
    {
        this.radious=r;
    }


    Area():number
    {
        return this.PI*this.radious*this.radious;
    }
}


var objCircleOne = new Circle(11);
var ret:number=0;
ret =objCircleOne.Area();
console.log("Area of circle is "+ret);


var objCircleTwo = new Circle(40);
ret =objCircleTwo.Area();
console.log("Area of circle is "+ret);
```

```
D:\Angular\Assignments\3>node AreaOfCircle.js
Area of circle is 379.94
Area of circle is 5024
```

# Two

```
class ArithmaticOperation
{
    Number1:number=0;
    Number2:number=0;

    public constructor(Value1:number,Value2:number)
    {
        this.Number1=Value1;
        this.Number2=Value2;
    }

    Addition():number
    {
        return this.Number1+this.Number2;
    }

    Substraction():number
    {
        return this.Number1-this.Number2;
    }

    Multiplication():number
    {
        return this.Number1*this.Number2;
    }

    Division():number
    {
        return this.Number1*this.Number2;
    }
```

```
}

var obj=new ArithmaticOperation(20,10);

var ret = obj.Addition();


console.log("Addition is "+ret);


var ret = obj.Substraction();
console.log("Substraction is "+ret);


var ret = obj.Multiplication();
console.log("Multiplication is "+ret);


var ret = obj.Division();
console.log("Division is "+ret);
```

```
D:\Angular\Assignments\3>node Arithmatic.js
Addition is 30
Substraction is 10
Multiplication is 200
Division is 200
```

# Three

```
class Circle
{
    radious:number;

    PI:number=3.14;


    constructor(r:number)

    {

        this.radious=r;

    }


    Area():number

    {

        return this.PI*this.radious*this.radious;

    }
}


class CircleX extends Circle
{
    constructor(data:number)

    {

        super(data);

    }


    CalculateCircumference():number

    {

        return 2*this.PI*this.radious;

    }
}


var objCircle=new CircleX(12);

var ret:number=0;
```

```
ret=objCircle.Area();

console.log("Area of circle is "+ret);



ret=objCircle.CalculateCircumference();

console.log("Circumference of circle is "+ret);
```

```
D:\Angular\Assignments\3>node Circumference.js
Area of circle is 452.15999999999997
Circumference of circle is 75.36
```