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//Assignment-3 | Que-1 | RID-073AM_Viraj

////////////////////////////////////

```
class Arithmetic
{
    private Number1 : number;
    private Number2 : number;

    constructor(iVal1 : number, iVal2 : number)
    {
        this.Number1 = iVal1;
        this.Number2 = iVal2;
    }
    Addition() : number
    {
        return this.Number1 + this.Number2;
    }
    Substraction() : number
    {
        return this.Number1 - this.Number2;
    }
    Division() : number
    {
        return this.Number1 / this.Number2;
    }
    Multiplication() : number
    {
        return this.Number1 * this.Number2;
    }
}
var aObj = new Arithmetic(21,11);
var bObj = new Arithmetic(101,51);

var iRet : number = 0;
```

```
console.log("Output for first object");

iRet = aObj.Addition();
console.log("Addition is : "+iRet);
iRet = aObj.Substraction();
console.log("Substraction is : "+iRet);
iRet = aObj.Division();
console.log("Division is : "+iRet);
iRet = aObj.Multiplication();
console.log("Multiplication is : "+iRet);
console.log("\n");
```

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```
console.log("Output for Second object");

iRet = bObj.Addition();
console.log("Addition is : "+iRet);
iRet = bObj.Substraction();
console.log("Substraction is : "+iRet);
iRet = bObj.Division();
console.log("Division is : "+iRet);
iRet = bObj.Multiplication();
console.log("Multiplication is : "+iRet);
```

Input : Obj1 = 11,22
 Obj2 = 51,101

Output :

```
C:\Users\Viraj\Desktop\Marvellous\MEAN\Assignments MEAN\Assignment-3-(Rid_073AM_Viraj)>node Assi-3_Q-1.js
Output for first object
Addition is : 32
Substraction is : 10
Division is : 1.9090909090909092
Multiplication is : 231

Output for Second object
Addition is : 152
Substraction is : 50
Division is : 1.9803921568627452
Multiplication is : 5151
```

//Assignment-3 | Que-2 | RID-073AM_Viraj

```
class Circle
{
    private Radius : number;
    private PI : number;

    constructor(iVal : number)
    {
        this.Radius = iVal;
        this.PI = 3.14;
    }
    Area() : number
    {
        var iArea : number = 0;

        iArea = this.PI * this.Radius * this.Radius;

        return iArea;
    }
}

var iRet : number = 0;

var c1Obj = new Circle(4);
iRet = c1Obj.Area();
console.log("Area of Circle for obj1 is : "+iRet);

var c2Obj = new Circle(10);
iRet = c2Obj.Area();
console.log("Area of Circle for obj2 is : "+iRet);
```

Input : Obj1 = 4
 Obj2 = 10

Output:

```
C:\Users\Viraj\Desktop\Marvellous\MEAN\Assignments MEAN\Assignment-3-(Rid_073AM_Viraj)>node Assi-3_Q-2.js
Area of Circle for obj1 is : 50.24
Area of Circle for obj2 is : 314
```

//Assignment-3 | Que-3 | RID-073AM_Viraj

```
class Circle
{
    public Radius : number;
    public PI : number;

    constructor(iVal : number)
    {
        this.Radius = iVal;
        this.PI = 3.14;
    }
    Area() : number
    {
        var iArea : number = 0;

        iArea = this.PI * this.Radius * this.Radius;

        return iArea;
    }
}
class CircleX extends Circle
{
    constructor(iVal : number)
    {
        super(iVal);
    }
    Circumference() : number
    {
        var iCircum : number = 0;

        iCircum = 2 * this.PI * this.Radius;

        return iCircum;
    }
}
var iRet : number = 0;
```

```
var Obj1 = new CircleX(4);
iRet = Obj1.Area();
console.log("Area of Circle for Obj1 is : "+iRet);
iRet = Obj1.Circumference();
console.log("Circumference of Circle for Obj1 is :"+iRet);
```

```
var Obj2 = new CircleX(10);
iRet = Obj2.Area();
console.log("Area of Circle for Obj2 is : "+iRet);
iRet = Obj2.Circumference();
console.log("Circumference of Circle for Obj2 is :"+iRet);
```

Input : Obj1 = 4
Obj2 = 10

Output:

C:\WINDOWS\system32\cmd.exe

```
C:\Users\Viraj\Desktop\Marvellous\MEAN\Assignments MEAN\Assignment-3-(Rid_073AM_Viraj)>node Assi-3_Q-3.js
Area of Circle for Obj1 is : 50.24
Circumference of Circle for Obj1 is 25.12
Area of Circle for Obj2 is : 314
Circumference of Circle for Obj2 is 62.800000000000004
```

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