Assignmet-3

AnsQ1:-

```
// Class Defination
class Arithematic
{
    // Characteristics
    No1 : number;
    No2 : number;

    constructor(a : number, b : number)
    {
        this.No1 = a;
        this.No2 = b;
    }
    Addition()      // Behaviour
    {
        var Ans : number = 0;       // Local variable
        Ans = this.No1 + this.No2;
        return Ans;
    }
    Substraction()      // Behaviour
    {
        var Ans : number = 0;       // Local variable
        Ans = this.No1 - this.No2;
        return Ans;
    }
    Multiplication()
    {
        var Ans : number = 0;
        Ans = this.No1 * this.No2;
        return Ans;

    }
    Division()
    {
        var Ans : number = 0;
        Ans = this.No1 / this.No2;
        return Ans;
    }
}
var obj1 = new Arithematic(10,11);
var Ret : number = 0;
Ret = obj1.Addition();
console.log("Addition is : "+Ret);
```

```
Ret = obj1.Substraction();
console.log("Substraction is : "+Ret);

Ret = obj1.Multiplication();
console.log("Multiplication : "+Ret);

Ret = obj1.Division();
console.log("Division : "+Ret);
```

Output:-

```
C:\WINDOWS\system32\cmd.exe

C:\Users\aditi\OneDrive\Desktop\assignment>cd C:\Users\aditi\OneDrive\Desktop\assignment

C:\Users\aditi\OneDrive\Desktop\assignment>tsc Arithmetc.ts

C:\Users\aditi\OneDrive\Desktop\assignment>node Arithmetc.js
Addition is : 21
Substraction is : -1
Multiplication : 110
Division : 0.9090909090909091
```

AnsQ2:-

```
class Circle
{
    // Characteristics
    No1 : number;
    No2 : number;

    constructor( Rdius: number, PI : number)
    {

       this.No1 = Rdius;
       this.No2 = PI;

    }
    AreaofCircle()
    {
       var Ans : number = 0;
```

```
        Ans = this.No2*this.No1*this.No1;
        return Ans;
    }
}
var obj1 = new Circle(5,3.14);
var Ret : number = 0;
Ret = obj1.AreaofCircle();
console.log("AreaofCicle: "+Ret);
```

output:-

```
C:\WINDOWS\system32\cmd.exe

C:\Users\aditi\OneDrive\Desktop\assignment>tsc Circle.ts

C:\Users\aditi\OneDrive\Desktop\assignment>node Circle.js
AreaofCicle: 78.5

C:\Users\aditi\OneDrive\Desktop\assignment>
```

AnsQ3:-

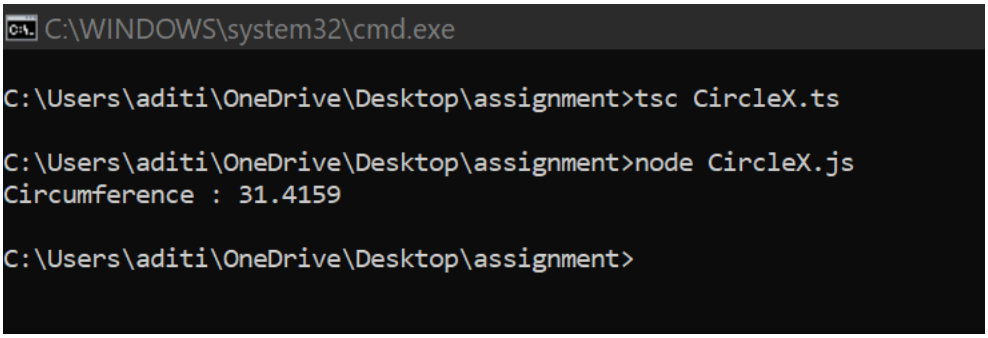
```
class CircleX
{
    // Characteristics
    No1 : number;
    No2 : number;

    constructor( Rdius: number, PI : number)
    {

        this.No1 = Rdius;
        this.No2 = PI;

    }
    Circumference()
    {
        var Ans : number = 0;
        Ans = 2*this.No2*this.No1;
        return Ans;
    }
}
var obj1 = new CircleX(5,3.14159);
var Ret : number = 0;
Ret = obj1.Circumference();
console.log("Circumference : "+Ret);
```

Output:-


C:\WINDOWS\system32\cmd.exe
C:\Users\aditi\OneDrive\Desktop\assignment>tsc CircleX.ts
C:\Users\aditi\OneDrive\Desktop\assignment>node CircleX.js
Circumference : 31.4159
C:\Users\aditi\OneDrive\Desktop\assignment>