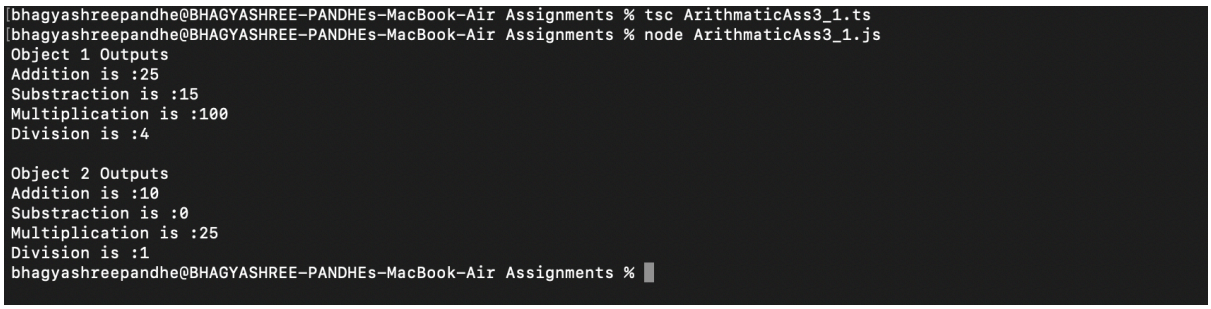
Angular Assignment 3

Q1:

```
class ArithmaticAss3_1 {
  No1: number;
  No2: number;
  Result: number = 0;

  constructor(X: number, Y: number) {
    this.No1 = X;
    this.No2 = Y;
  }

  Addition(): number {
    this.Result = this.No1 + this.No2;
    return this.Result;
  }

  Substraction(): number {
    this.Result = this.No1 - this.No2;
    return this.Result;
  }

  Multiplication(): number {
    this.Result = this.No1 * this.No2;
    return this.Result;
  }

  Division(): number {
    this.Result = this.No1 / this.No2;
    return this.Result;
  }
}
console.log("Object 1 Outputs ");
var objA1 = new ArithmaticAss3_1(20, 5);

console.log("Addition is :" + objA1.Addition());

console.log("Substraction is :" + objA1.Substraction());

console.log("Multiplication is :" + objA1.Multiplication());

console.log("Division is :" + objA1.Division());
```

```
console.log("\nObject 2 Outputs ");
var objA2 = new ArithmaticAss3_1(5, 5);

console.log("Addition is :" + objA2.Addition());

console.log("Substraction is :" + objA2.Substraction());

console.log("Multiplication is :" + objA2.Multiplication());

console.log("Division is :" + objA2.Division());
```

Output:



Question 2:

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

  constructor(Rad: number) {
    this.Radius = Rad;
    this.PI = 3.14;
  }

  Area(): number {
    return this.PI * this.Radius * this.Radius;
  }
}
console.log("Object 1 Outputs ");
var objCircle1 = new Circle(20);
console.log("Area of Circle is : " + objCircle1.Area());

console.log("Object 2 Outputs ");
var objCircle2 = new Circle(5);
console.log("Area of Circle is : " + objCircle2.Area());
```

```
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc Circle.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node Circle.js
Object 1 Outputs
Area of Circle is : 1256
Object 2 Outputs
Area of Circle is : 78.5
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments %
```

Question 3:

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

  constructor(Rad: number) {
    this.Radius = Rad;
    this.PI = 3.14;
  }

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

class CircleX extends Circle {
  PI: number = 3.14;
  constructor(radius: number) {
    super(radius);
  }

  Circumference(): number {
    return 2 * this.PI * this.Radius;
  }
}
console.log("Object 1 Outputs ");
var objCircleX1 = new CircleX(20);
console.log("Circumference of Circle is : " +
objCircleX1.Circumference());

console.log("Object 2 Outputs ");
var objCircleX2 = new CircleX(5);
console.log("Circumference of Circle is : " +
objCircleX2.Circumference());
```

```
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % tsc CircleX.ts
bhagyashreepandhe@BHAGYASHREE-PANDHEs-MacBook-Air Assignments % node CircleX.js
Object 1 Outputs
Circumference of Circle is : 125.60000000000001
Object 2 Outputs
Circumference of Circle is : 31.400000000000002
```