Question 1 :

```typescript
// write a typescript program to which contain function named Maximum. that
function accept array of numbers and return largest number from array as
// Input : 23,89,6,29,56,45,77,32
// Otput : 89

function Maximum(num1 : number[]) : number
{
    var i : number = 0;
    var max :number = 0;

    for(i = 0; i < num1.length; i++)
    {
        if(num1[i] > max)
        {
            max = num1[i];
        }
    }
    return max;
}

var maxNum : number = 0;
var array : number [] = [23,89,6,29,56,45,77,32];

maxNum = Maximum(array);
console.log("Maximum number is :"+maxNum);
```
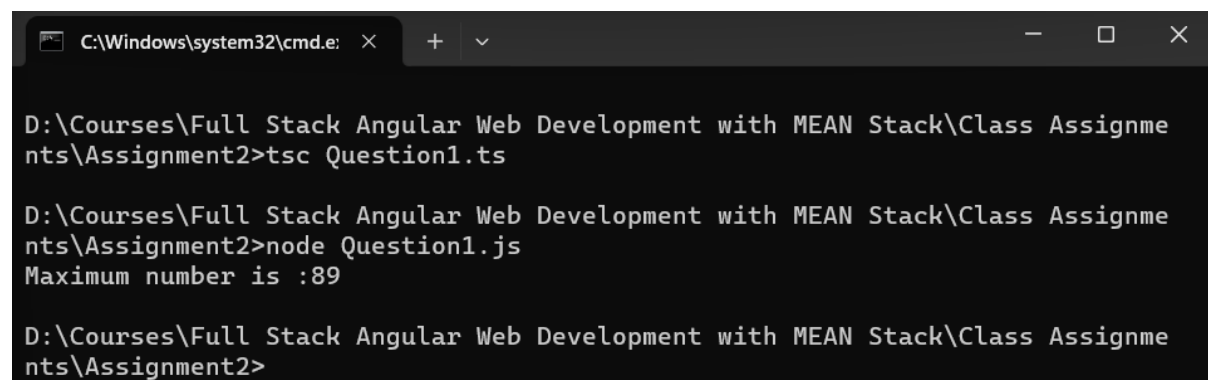
Output:

```
C:\Windows\system32\cmd.e:  X   +  v                              —  □  X

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>tsc Question1.ts

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>node Question1.js
Maximum number is :89

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nts\Assignment2>
```
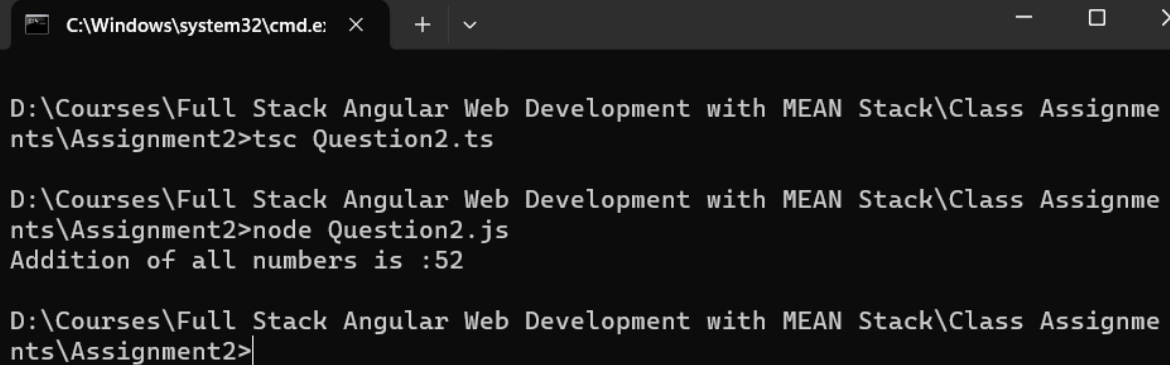
Question 2:

```typescript
// write a typescript program to which contain function named Summation. that
function accept array of numbers and return summation of each number from
array
// Input : 23,6,7,4,5,7
// Output : Addition is 52

function Summation(num1 : number []) : number
{
    var i : number = 0;
    var sum : number = 0;
    for(i = 0; i < num1.length; i++)
    {
        sum = sum + num1[i];
    }
    return sum;
}

var Additon: number = 0;
var array : number [] = [23,6,7,4,5,7];

Additon = Summation(array);
console.log("Addition of all numbers is :"+Additon);
```

Output :

```
D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>tsc Question2.ts

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>node Question2.js
Addition of all numbers is :52

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nts\Assignment2>
```

Question 3 :

```typescript
// write a typescript program to which contain function named Maximum. that
function accept array of numbers and return largest number from array as
// Input : 23,89,6,29,56,45,77,32
// Otput : 89

function Maximum(num1 : number[]) : number
{
    var i : number = 0;
    var j : number = 0;
    var firstMax :number = 0;
    var secondMax :number = 0;

    for(i = 0; i < num1.length; i++)
    {
        if(num1[i] > firstMax)
        {
            firstMax = num1[i];
        }
        else if(num1[i] > secondMax)
        {
            secondMax = num1[i];
        }
    }
    return secondMax;
}

var secondMaxNum : number = 0;
var array : number [] = [23,89,6,29,56,45,77,32];

secondMaxNum = Maximum(array);
console.log("Maximum number is :"+secondMaxNum);
```

Output:

```
D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>tsc Question3.ts

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>node Question3.js
Maximum number is :77

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>
```

Question 4:

```typescript
var ChkArmstrong = (No1: number): boolean => {
    var str: string = "";
    var length: number = 0;

    str = String(No1);
    length = str.length;

    const sum = str
        .split('')
        .map(digit => Number(digit))
        .reduce((accumulator, current) => accumulator + Math.pow(current,
length), 0);
    return sum === No1;
};

var Num1: number = 153;
var Result: boolean = false;
Result = ChkArmstrong(Num1);

if (Result == true)
{
    console.log(Num1 + " is an Armstrong number ");
}
else
{
    console.log(Num1 + " is not an Armstrong number ");
}
```

Output:

```
D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>tsc Question4.ts

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>node Question4.js
153 is an Armstrong number

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>
```

Question 5:

```typescript
// write a typescript program to which contain function named ChkString. that
function accept one string and check whether that string contains "Marvellous"
word or not.
// Input : "Pune Kothrud Marvellous Infosystems"
// Otput : String contains Marvellous in it.

function ChkString(inputString : string) : string
{
    if (inputString.indexOf("Marvellous"))
    {
        return "String contains Marvellous in it.";
    }
    else
    {
        return "String does not contain Marvellous.";
    }
}


var Input : string = "Pune Kothrud Marvellous Infosystems";

var  Result : string = ChkString(Input);
console.log(Result);
```

Output:

```
D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>tsc Question5.ts

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>node Question5.js
String contains Marvellous in it.

D:\Courses\Full Stack Angular Web Development with MEAN Stack\Class Assignme
nts\Assignment2>
```