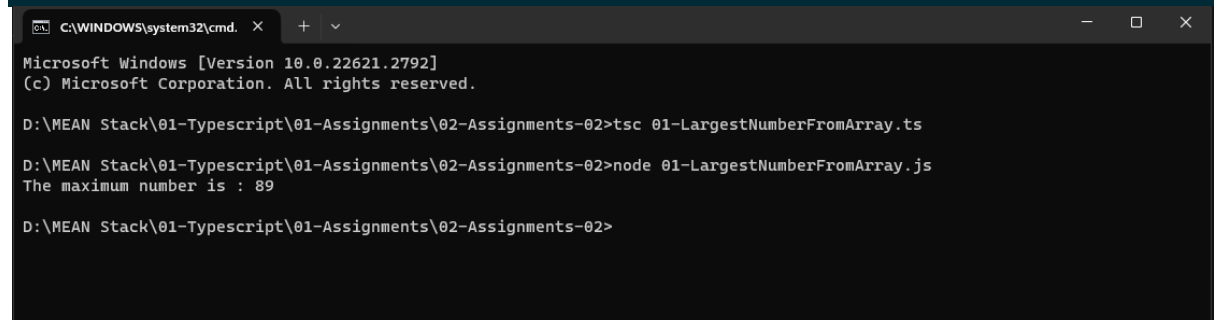


```
// 1. Write a typescript program which contains one function named as Maximum.  
// That function accepts array of numbers and returns the largest number from  
array.  
// Input: 23 89 6 29 56 45 77 32  
// Output: Maximum number is 89
```

```
function FindMaxNumberArray(array : number[]) : number  
{  
    var maxNumber : number = array[0];  
    var i : number = 0;  
  
    for(i = 0; i < array.length; i++)  
    {  
        if(array[i] > maxNumber)  
        {  
            maxNumber = array[i];  
        }  
    }  
    return maxNumber;  
}
```

```
var array : number[] = [23, 89, 6, 74, 56, 45, 77, 32];  
var iMaxNumber = FindMaxNumberArray(array);  
console.log("The maximum number is : "+iMaxNumber);
```



```
C:\WINDOWS\system32\cmd. X + v  
Microsoft Windows [Version 10.0.22621.2792]  
(c) Microsoft Corporation. All rights reserved.  
  
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>tsc 01-LargestNumberFromArray.ts  
  
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>node 01-LargestNumberFromArray.js  
The maximum number is : 89  
  
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>
```

```
// 2. Write a typescript program which contains one function named as  
Summation.  
// That function accepts array of numbers and returns the summation of each  
number from array.  
// Input: 23 6 7 4 74 5 77  
// Output: 196
```

```
function SumOfArray(array : number[]) : number  
{  
    var sum : number = 0;  
    var i : number = 0;  
  
    for(i = 0; i < array.length; i++)
```

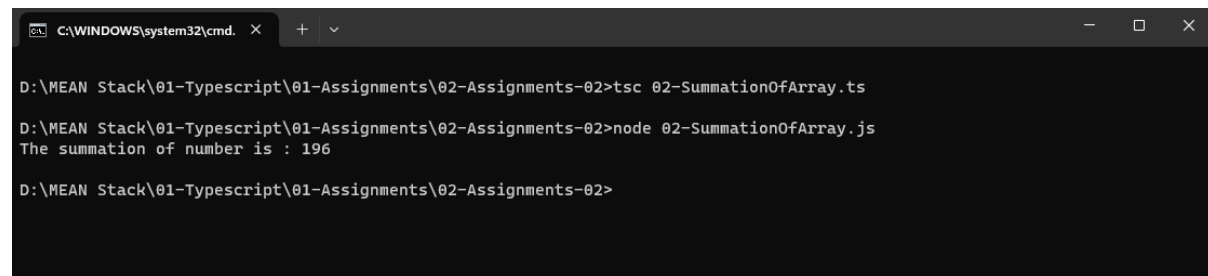
```

    {
        sum = sum + array[i];
    }

    return sum;
}

var array : number[] = [23, 6, 7, 4, 74, 5, 77];
var iSum = SumOfArray(array);
console.log("The summation of number is : "+iSum);

```



```

C:\WINDOWS\system32\cmd. x + v
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>tsc 02-SummationOfArray.ts
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>node 02-SummationOfArray.js
The summation of number is : 196
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>

```

*// 3. Write a typescript program which contains one function named as Maximum.
 // That function accepts array of numbers and returns the second largest
 number from array.
 // Input: 23 6 7 4 74 5 77
 // Output: 77*

```

function secondLargestNumberFromArray(array : number[]) : number
{
    var maxNumber_1 : number = array[0];
    var maxNumber_2 : number = array[1];

    var maxNo1 = maxNumber_1;

    if(maxNumber_1 < maxNumber_2)
    {
        maxNumber_1 = maxNumber_2;
        maxNumber_2 = maxNo1;
    }
    var i : number = 0;

    for(i = 0; i < array.length; i++)
    {
        if(maxNumber_1 < array[i])
        {
            maxNumber_1 = array[i];
        }
    }
}

```

```

        if((maxNumber_2 < array[i]) && (array[i] < maxNumber_1))
        {
            maxNumber_2 = array[i];
        }
    }
    return maxNumber_2;
}

var array : number[] = [23, 89, 6, 74, 56, 45, 77, 32];

var secondLargestNumber = secondLargestNumberFromArray(array);
console.log("The second maximum number from the array is : 
"+secondLargestNumber);

```

```

C:\WINDOWS\system32\cmd. X + v
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>tsc 03-SecondLargestNumber.ts
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>node 03-SecondLargestNumber.js
The second maximum number from the array is : 77
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>

```

// Write a typescript prgoram which contains one arrow function named as ChkArmstrong.

// That function accepts one number and check whether number is Armstrong number or not.

// Input: 153

// Output: It is Armstrong number

```

function CheckArmstrong(No : number) : boolean
{
    var iDigit : number;
    var iCnt : number = 0;
    var iSum : number = 0;
    var i : number = 0;
    var Power : number = 1;
    var iTemp : number = No;

    while(iTemp != 0)
    {
        iTemp = Math.floor(iTemp / 10);
        iCnt++;
    }

    iTemp = No;
    while(iTemp != 0)
    {
        iDigit = iTemp % 10;

```

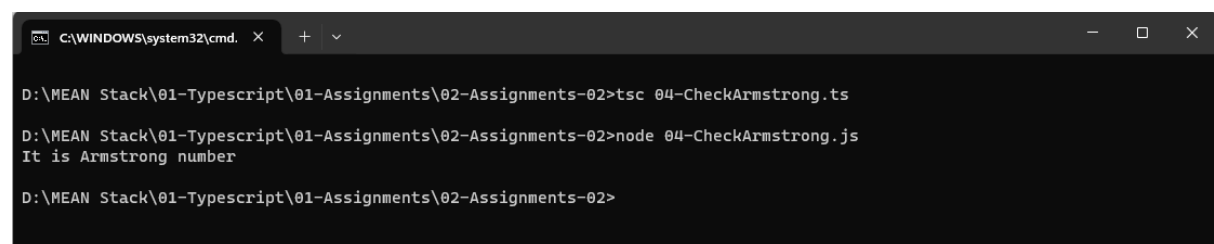
```

        for(i = 1; i <= iCnt; i++)
        {
            Power = Power * iDigit;
        }
        iSum = iSum + Power;
        Power = 1;
        iTemp = Math.floor(iTemp / 10);
    }

    if(iSum == No)
    {
        return true;
    }
    else
    {
        return false;
    }
}

var Num : number = 153;
var Result : boolean = false;
Result = CheckArmstrong(Num);
if(Result)
{
    console.log("It is Armstrong number");
}
else
{
    console.log("It is not Armstrong number");
}

```



```

C:\WINDOWS\system32\cmd. X + -
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>tsc 04-CheckArmstrong.ts
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>node 04-CheckArmstrong.js
It is Armstrong number
D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>

```

```

// Write a typescript program which contains one arrow function named as ChkString.
// That function accepts one string and check whether that string contains "Marvellous" word or not.
// Input: "Pune Kothrud Marvellous Infosystems"
// Output: String contains Marvellous in it.

```

```
function ChkString(str : string) : boolean
{
    if(str.includes("Marvellous"))
    {
        return true;
    }
    return false;
}

var str : string = "Pune Kothrud Marvellous Infosystems";
var result : boolean = false;

result = ChkString(str);
if(result)
{
    console.log("String contains Marvellous in it.");
}
else
{
    console.log("String doesn't contains Marvellous in it.");
}
```

```
C:\WINDOWS\system32\cmd. x + v - □ x

D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>tsc 05-CheckString.ts

D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>node 05-CheckString.js
String contains Marvellous in it.

D:\MEAN Stack\01-TypeScript\01-Assignments\02-Assignments-02>
```