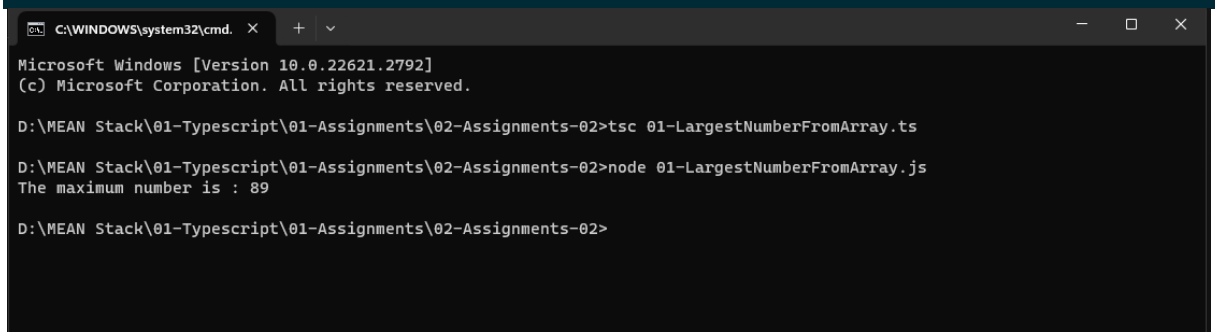
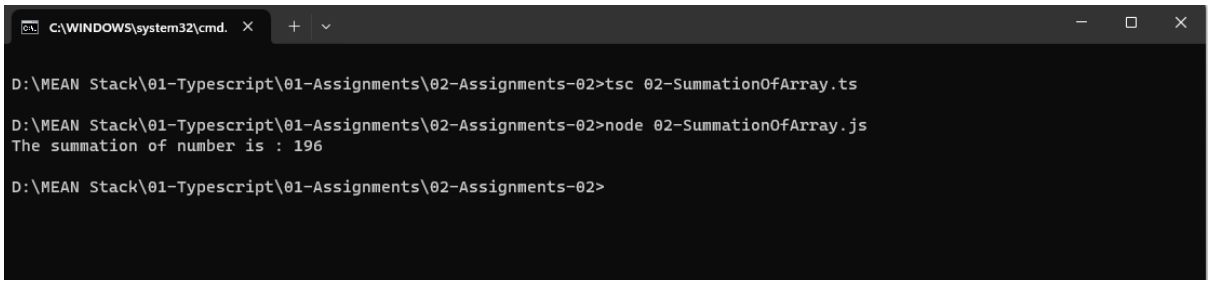
```typescript
// 1. Write a typescript program which contains one function named as Maximum.
// That function accepts array of numbers and returns the largest number from
array.
// Input:   23  89  6   29  56  45  77  32
// Output:  Maximum number is 89

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);
```



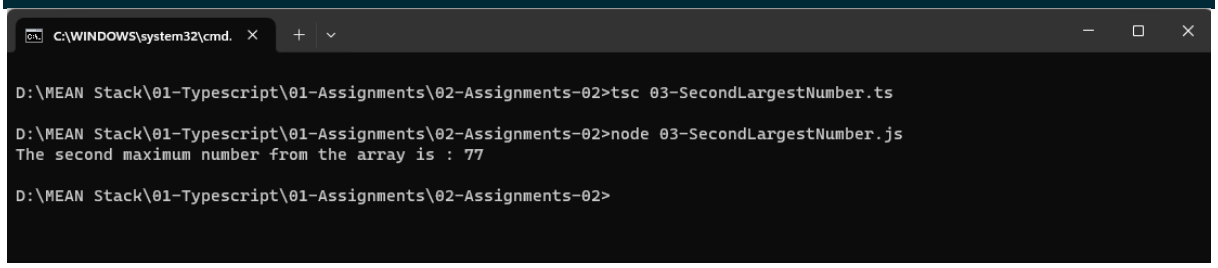

```typescript
// 2. Write a typescript program which contains one function named as
Summation.
// That function accepts array of numbers and returns the summation of each
number from array.
// Input:   23  6   7   4   74  5   77
// Output: 196

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);
```



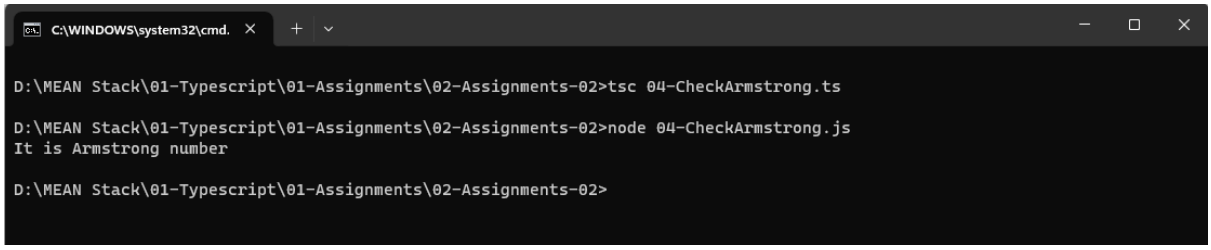

```
// 3. Write a typescript program which contains one function named as Maximum.
// That function accepts array of numbers and returns the second largest
number from array.
// Input:   23  6   7   4   74  5   77
// Output: 77

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);
```




```
// 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");
}
```




```
// Write a typescript prgoram 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.
```

```typescript
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.");
}
```