1. Write a typescript program which contains one function named as Maximum.That function accepts array of numbers and returns the largest number from aray.

Input: 23   89   6   29   56   45   77   32

Output: Maximum number is 89

```typescript
C: > Users > admin > Desktop > typescript > TS MaximumArray.ts > ⊕ Maximum
 1    function Maximum(Arr : number[]) : void
 2    {
 3        var max = Arr[0]
 4        for( var Cnt = 0; Cnt < Arr.length;Cnt++)
 5        {
 6            if(Arr[Cnt] > max)
 7             max = Arr[Cnt]
 8        }
 9        console.log("Maximum number is "+max)
10
11    }
12
13    var List : number[] = [23,89,6,29,56,45,77,32]
14    Maximum(List)
```

```
C:\WINDOWS\system32\cmd.exe
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C:\Users\admin>cd desktop/typescript

C:\Users\admin\Desktop\typescript>tsc MaximumArray.ts

C:\Users\admin\Desktop\typescript>node MaximumArray.js
Maximum number is 89

C:\Users\admin\Desktop\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   5   7

Output: Addition is 52

```
C: > Users > admin > Desktop > typescript > TS Summation.ts > ⊗ Summation
  1   function Summation(Arr : number[]) : number
  2   {
  3       let Sum : number = 0
  4       let Cnt : number = 0
  5
  6       for(Cnt =0; Cnt < Arr.length; Cnt++)
  7           {
  8               Sum = Sum + Arr[Cnt];
  9           }
 10       return Sum
 11   }
 12
 13   var List : number[] = [23,6,7,4,5,7]
 14
 15   var Ans : number = 0
 16
 17   Ans = Summation(List)
 18
 19   console.log("Addition is : "+Ans)
```

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

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C:\Users\admin>cd desktop/typescript

C:\Users\admin\Desktop\typescript>tsc Summation.ts

C:\Users\admin\Desktop\typescript>node Summation.js
Addition is : 52

C:\Users\admin\Desktop\typescript>
```

3. Write a typescript program which contains one function named Maximum. That function accepts array of numbers and returns the second largest number from array.

Input: 23 89 6 29 56 45 77 32

Output: Second largest number is 77

```
C: > Users > admin > Desktop > typescript > TS Maximum.ts > ...
  1   function Maximum(Arr : number[]) : void
  2   {
  3       var Max1 : number = 0
  4       var Max2 : number = 0
  5       for(var Cnt =0;Cnt<Arr.length;Cnt++)
  6       {
  7           if(Arr[Cnt] > Max1)
  8           {
  9               Max2 = Max1
 10               Max1 = Arr[Cnt]
 11           }
 12           else
 13           {
 14               if(Arr[Cnt] > Max2 && Arr[Cnt]< Max1)
 15               {
 16                   Max2 = Arr[Cnt]
 17               }
 18
 19           }
 20
 21       }
 22       console.log("Second Maximum number is "+Max2 )
 23   }
 24   var List : number[]=[23,89,6,29,56,45,77,32]
 25   Maximum(List)
```

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

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C:\Users\admin>cd desktop/typescript

C:\Users\admin\Desktop\typescript>tsc maximum.ts

C:\Users\admin\Desktop\typescript>node Maximum.js
Second Maximum number is 77

C:\Users\admin\Desktop\typescript>
```

4. Write a typescript program which contains one arrow function names ChkArmstrong. That function accepts one numbers and check whether number is Armstrong number or not.

Input: 153

Output : It is Armstrong number

5. Write a typescript program which contains one function named Chkstring. That function accept one string and check whether that string contains "Marvellous" word or not.

Input: "Pune Kothrud Marvellous Infosystems"

Output: String contains Marvellous in it

C: > Users > admin > Desktop > typescript > TS armstrong.ts > ...

```typescript
function ChkArmstrong(No1 : number): void
{
    var sum : number = 0
    var digit : number = 3
    while(No1 > 0)
    {
    var r : number
     r = Math.floor(No1 % 10);
    sum = sum + (r * r * r);
    No1 = Math.floor(No1 / 10);
    }
    if(sum == No1)
    {
    console.log("It is Armstrong number")
    }
    else
    {
    console.log("It is not Armstrong no")
    }
}
var No1 : number = 153
ChkArmstrong(No1)
```

C:\WINDOWS\system32\cmd.exe

```
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C:\Users\admin>cd desktop/typescript

C:\Users\admin\Desktop\typescript>tsc string.ts

C:\Users\admin\Desktop\typescript>node string.js
string contains Marvellous in it

C:\Users\admin\Desktop\typescript>
```