

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

```
1  function Maximum(num:number[]):number
2  {
3      var iMax:number=0;
4
5      for(var i=0; i< num.length; i++)
6      {
7          if(num[i]> iMax)
8          {
9              iMax=num[i];
10         }
11     }
12     return iMax;
13 }
14
15 var arr:number[]= new Array(8);
16 arr = [23,89,6,29,56,45,77,32 ] ;
17
18 var iret=Maximum(arr);
19 console.log("Maximum number from array is "+iret);
```

PROBLEMS 1 OUTPUT DEBUG CONSOLE TERMINAL

```
PS F:\AngularR\Assignment2> tsc .\1_Ass2.ts
PS F:\AngularR\Assignment2> node .\1_Ass2.js
Maximum number from array is 89
PS F:\AngularR\Assignment2> 
```

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

F: ▸ AngularR ▸ Assignment2 ▸ TS 2_Ass2.ts ▸ Summation

```
1  function Summation(num:number[]):number
2  {
3      var sum:number=0;
4      for(var i=0 ;i<num.length ; i++)
5      {
6          sum = sum+num[i];
7      }
8      return sum;
9  }
10
11  var arr:number[]=[23,6,7,4,5,7];
12  var iret=Summation(arr);
13  console.log("Addition is "+iret);
```

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL

```
PS F:\> cd AngularR/Assignment2
PS F:\AngularR\Assignment2> tsc .\2_Ass2.ts
PS F:\AngularR\Assignment2> node .\2_Ass2.js
Addition is 52
PS F:\AngularR\Assignment2> □
```

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 89 6 29 56 45 77 32
Output : Second Maximum number is 77

```
1  function Maximum(num:number[]):number
2  {
3      var iMax:number=0,iPos=0;
4      var iMax2:number=0;
5      for(var i=0; i< num.length; i++)
6      {
7          if(num[i]> iMax)
8          {
9              iMax=num[i];
10             iPos=i;
11         }
12     }
13     num[iPos]=0;
14     for(var i=0; i< num.length; i++)
15     {
16         if(num[i]> iMax2)
17         {
18             iMax2=num[i];
19         }
20     }
21     return iMax2;
22 }
23 var arr:number[]= [23,89,6,29,56,45,77,32 ] ;
24 var iret=Maximum(arr);
25 console.log("Second Maximum number from array is "+iret);
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL

```
PS F:\AngularR\Assignment2> tsc .\3_Ass2.ts
PS F:\AngularR\Assignment2> node .\3_Ass2.js
Second Maximum number from array is 77
PS F:\AngularR\Assignment2> □
```

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

Input : 153

Output : It is Armstrong number

```
1  var ChkArmstrong = (x:number)=> {
2      var temp:number = x;
3      var sum:number=0;
4      var digit:number=0;
5
6      while(x > 0)
7      {
8          digit=x %10;
9          sum = sum+(digit*digit*digit);
10         x = Math.floor(x/10);
11     }
12     if(temp == sum)
13         console.log("It is Armstrong number");
14     else
15         console.log("It is not Armstrong number");
16 }
17 ChkArmstrong(153);
18 ChkArmstrong(23);
```

PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL

```
PS F:\AngularR\Assignment2> tsc .\4_Ass2.ts
PS F:\AngularR\Assignment2> node .\4_Ass2.js
It is Armstrong number
It is not Armstrong number
PS F:\AngularR\Assignment2> □
```

5. Write a typescript program which contains one function named as 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.

```
1  function ChkString(str:String):boolean
2  {
3      var words:string[];
4      words= str.split(" ");
5      for(var i=0 ; i< words.length ;i++)
6      {
7          if(words[i].localeCompare("Marvellous"))
8              break;
9      }
10     if(i == words.length)
11         return false;
12     else
13         return true;
14 }
15 var s:string="Pune Kothrud Marvellous Infosystems";
16 var bret:boolean = ChkString(s);
17 if(bret == true)
18     console.log("String contains Marvellous in it");
19 else
20     console.log("String does not contains Marvellous in it");
```

PROBLEMS 2 OUTPUT DEBUG CONSOLE TERMINAL

```
PS F:\AngularR\Assignment2> tsc .\5_Ass2.ts
PS F:\AngularR\Assignment2> node .\5_Ass2.js
String contains Marvellous in it
PS F:\AngularR\Assignment2> 
```