Assignment No 2

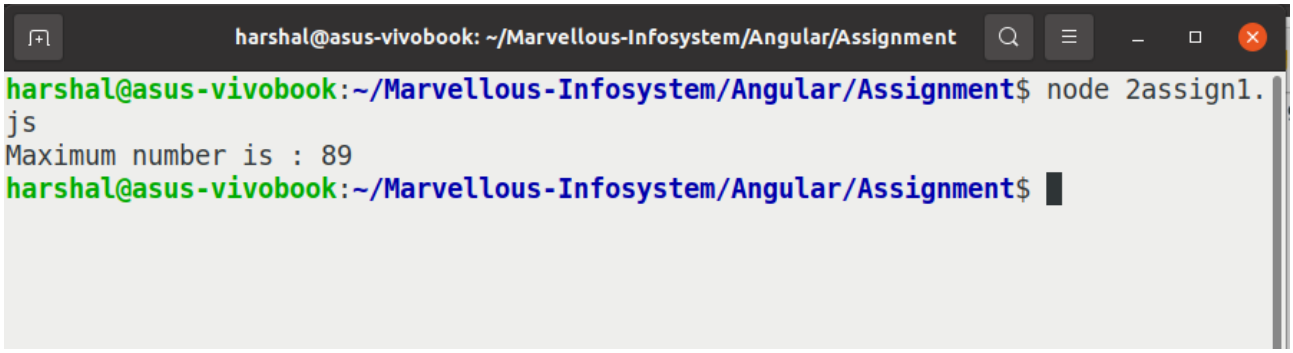
1. Write a typescript program which contains one function named as Maximum. That function accepts array of numbers and returns the largest number from array.

Input: 23 89 6 56 45 32

Output: Maximum number is 89

```
var Arr:number[] = [23,89,6,29,56,45,77,32]
var iRet : number = 0;
iRet = Max(Arr);
console.log("Maximum number is : "+iRet);

function Max(Brr:number[])
{
var iCnt : number = 0;
var iMax : number = 0;
for(iCnt = 0;iCnt < Brr.length;iCnt++)
{
if(iMax < Brr[iCnt])
{
iMax = Brr[iCnt];
}
}
return iMax;
}
```



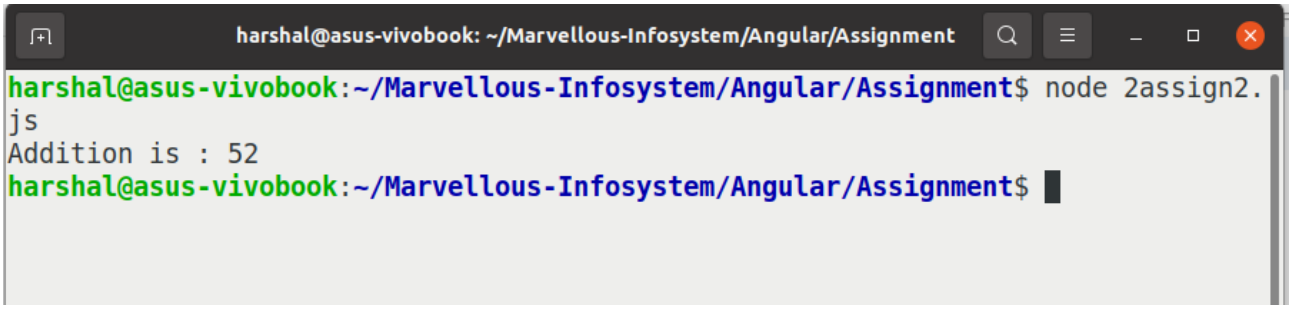
2. Write a typescript program which contains one function named as Summation. That function accepts array of numbers and returns the summation of each number from array.

Input :23 6 7 4 5 7

Output: Addition is 52

```
var Arr:number[] = [23,6,7,4,5,7]
var iRet : number = 0;
iRet = Addition(Arr);
console.log("Addition is : "+iRet);

function Addition(Brr:number[])
{
var iCnt : number = 0;
var iSum : number = 0;
for(iCnt = 0;iCnt < Brr.length;iCnt++)
{
iSum = iSum + Brr[iCnt];
}
return iSum;
}
```



.

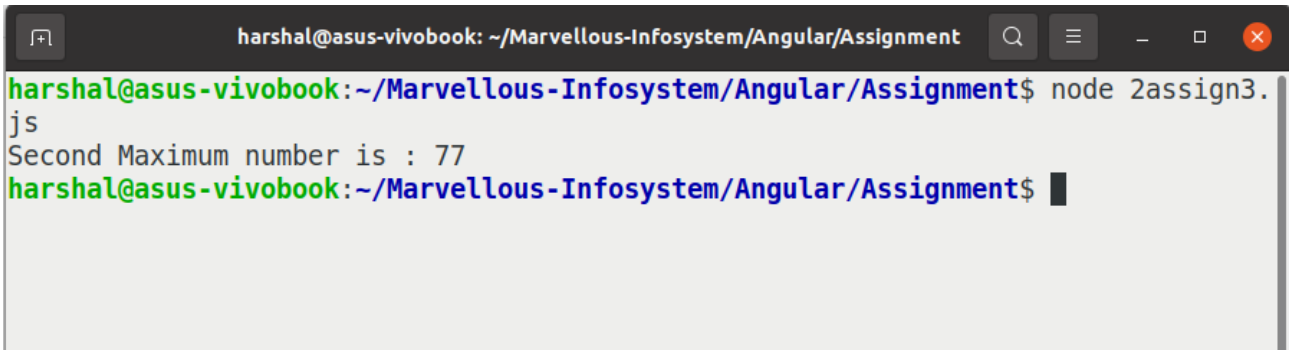
3. Write a typescript program which contains one function named as Maximum. That function accepts array of numbers and returns the second largest number from array.

Input : 23 89 6 29 56 45 77 32

Output: Second Maximum number is 77

```
var Arr:number[] = [23,89,6,29,56,45,77,32]
var iRet : number = 0;
iRet = Max(Arr);
console.log("Maximum number is : "+iRet);

function Max(Brr:number[])
{
var iCnt : number = 0;
var iMax : number = 0;
var iMax2 : number = 0;
for(iCnt = 0;iCnt < Brr.length;iCnt++)
{
if(iMax < Brr[iCnt])
{
iMax2 = iMax;
iMax = Brr[iCnt];
}
else if(Brr[iCnt] > iMax2 && Brr[iCnt] != iMax)
{
iMax2 = Brr[iCnt];
}
}
return iMax2;
}
```



.

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

```
function chkArmstrong(iNo:number):boolean
{
var iTemp:number=0
var iDigCnt:number=0
var iDigit:number=0
var iSum:number=0
var iCnt:number=0
var iMult:number =1;
iTemp = iNo;


while(iNo != 0)
{
iDigCnt++;
iNo = iNo / 10;
}

iNo = iTemp;

while(iNo != 0)
{
iMult = 1;
iDigit = iNo % 10;

for(iCnt = 1; iCnt <= iDigCnt; iCnt++)
{
iMult = iMult * iDigit;
}

iSum = iSum + iMult;
iNo = iNo / 10;
}
```

```
console.log("isum" + iSum)
console.log("isum" + iTemp)

if(iSum == iTemp)
{
return true;
}
else
{
return false;
}


}

var value:number = 153;
var iRet : boolean ;
chkArmstrong(value);
if(iRet == true)
{
console.log("Number is Armstrong");
}
else if(iRet == false)
{
console.log("Number is not Armstrong");
}
```