

1. Write a typescript program which contains one function named as Maximum. That function accepts

three parameters and it should returns largest value from three input parameters.

Input : 23 89 6

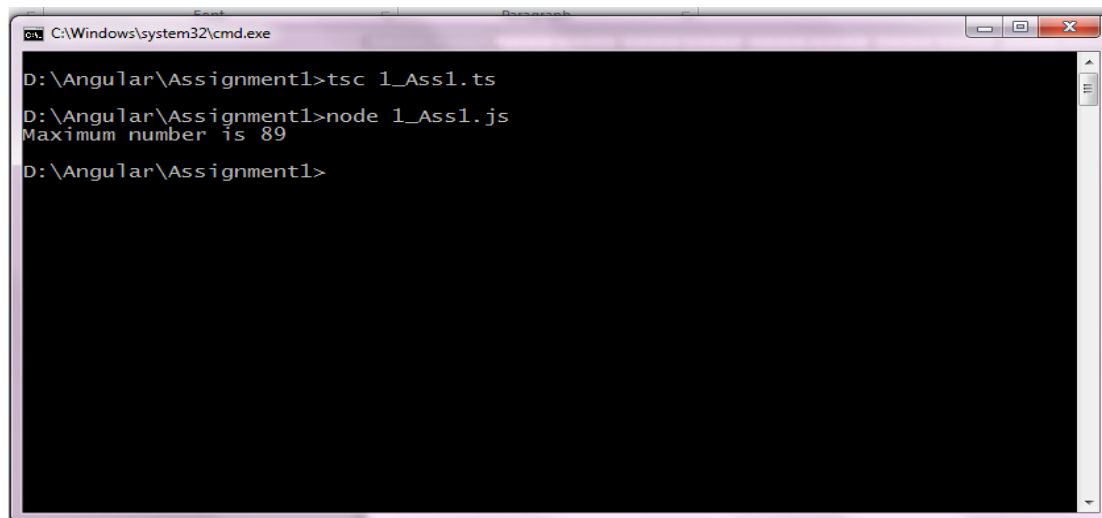
Output : Maximum number is 89

```
function Maximum(no1:number,no2:number,no3:number):number
{
    var Max:number;

    if((no1>no2)&&(no1>no3))
    {
        Max=no1;
    }
    else if((no2>no1)&&(no2>no3))
    {
        Max=no2;
    }
    else if((no3>no1)&&(no3>no2))
    {
        Max=no3;
    }
    return Max;
}
```

```
var iRet=Maximum(23,89,6);
```

```
console.log("Maximum number is "+iRet);
```



The screenshot shows a Windows command prompt window with the title bar "C:\Windows\system32\cmd.exe". The window contains the following text:

```
D:\Angular\Assignment1>tsc 1_Ass1.ts
D:\Angular\Assignment1>node 1_Ass1.js
Maximum number is 89
D:\Angular\Assignment1>
```

2. Write a typescript program which contains one function named as Area. That function should calculate area of circle. Accept value of radius from user and return its area. Default value of PI

should be 3.14 if it is not provided by the caller.

Input : 5

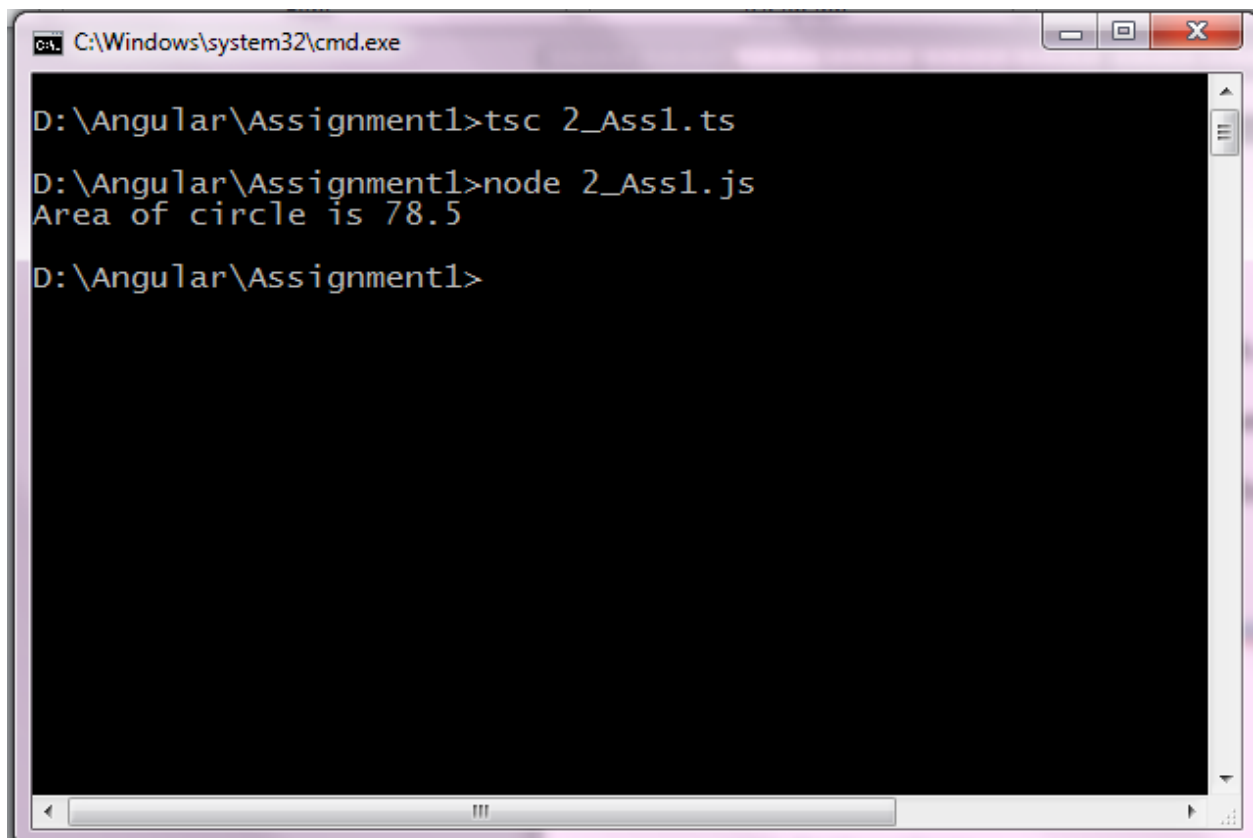
Output : Area of circle is 78.5

```
function Area(radius:number,PI:number=3.14):number
{
    var area= PI *radius*radius;
    return area;
}
```

```
var iret:number;
```

```
iret=Area(5);
```

```
console.log("Area of circle is "+iret);
```



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The prompt is at "D:\Angular\Assignment1>". The user has entered "tsc 2_Ass1.ts" to compile the TypeScript file. The prompt is now at "D:\Angular\Assignment1>". The user has entered "node 2_Ass1.js" to run the JavaScript file. The output of the program is displayed on the next line: "Area of circle is 78.5". The prompt is now at "D:\Angular\Assignment1>".

```
C:\Windows\system32\cmd.exe
D:\Angular\Assignment1>tsc 2_Ass1.ts
D:\Angular\Assignment1>node 2_Ass1.js
Area of circle is 78.5
D:\Angular\Assignment1>
```

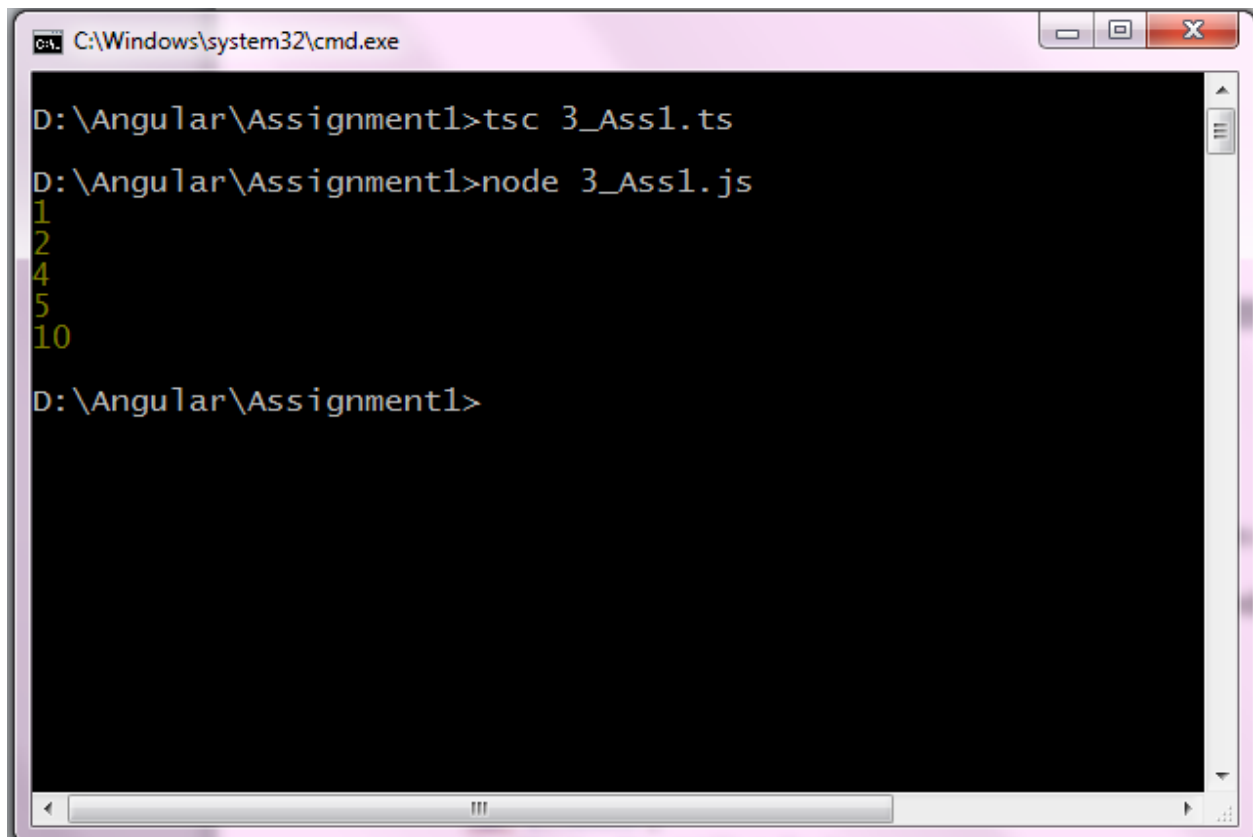
3. Write a typescript program which contains one function named as DisplayFactors. That function should accept one number and display factors of that number.

Input : 20

Output : 1 2 4 5 10

```
function DisplayFactors(no:number)
{
    var i:number;
    for(i =1; i<= no/2 ; i++)
    {
        if( no % i== 0)
        {
            console.log(i);
        }
    }
}
```

DisplayFactors(20);



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The prompt is at "D:\Angular\Assignment1>". The user has entered "tsc 3_Ass1.ts" to compile the TypeScript file. The prompt is now at "D:\Angular\Assignment1>". The user has entered "node 3_Ass1.js" to run the JavaScript file. The output of the program is displayed on the next line: "1", "2", "4", "5", and "10", each on a new line. The prompt is now at "D:\Angular\Assignment1>".

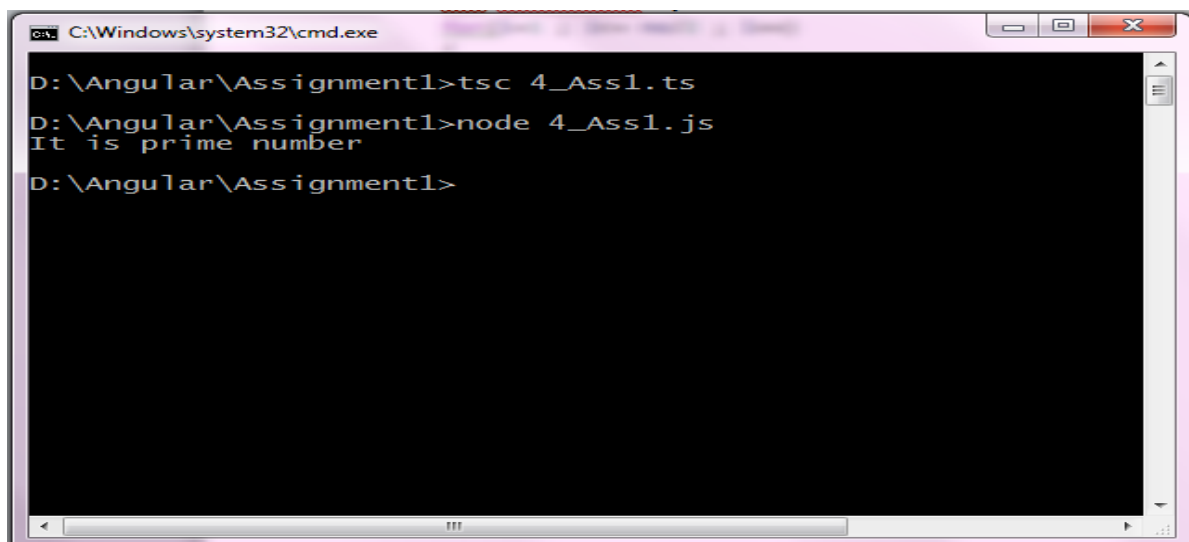
```
C:\Windows\system32\cmd.exe
D:\Angular\Assignment1>tsc 3_Ass1.ts
D:\Angular\Assignment1>node 3_Ass1.js
1
2
4
5
10
D:\Angular\Assignment1>
```

4. Write a typescript program which contains one function named as ChkPrime. That function should accept one number and it should return true if the given number is prime and otherwise return false.

Input : 11

Output : It is prime number

```
function ChkPrime(no:number):boolean
{
    var i:number;
    var sum:number=0;
    for(i=1 ; i<= no/2 ; i++)
    {
        if(no % i == 0)
        {
            sum=sum+i;
        }
    }
    if(sum == 1)
        return true;
    else
        return false;
}
var bret:boolean;
bret=ChkPrime(11);
if(bret == true)
    console.log("It is prime number");
else
    console.log("It is not prime number");
```



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The prompt is at "D:\Angular\Assignment1>". The user has entered "tsc 4_Ass1.ts" and "node 4_Ass1.js". The output of the program is "It is prime number".

```
C:\Windows\system32\cmd.exe
D:\Angular\Assignment1>tsc 4_Ass1.ts
D:\Angular\Assignment1>node 4_Ass1.js
It is prime number
D:\Angular\Assignment1>
```

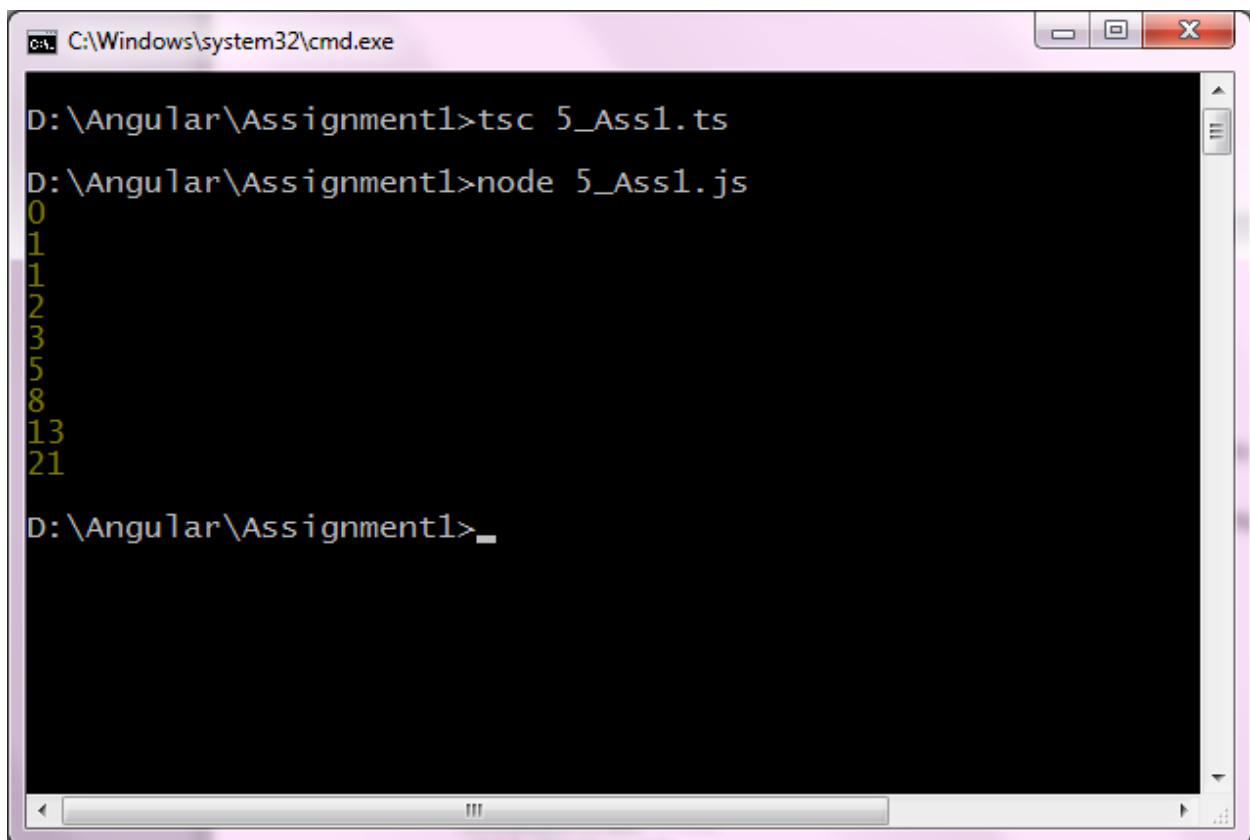
5. Write a typescript program which contains one function named as Fibonacci. That function accept one number from user and print Fibonacci series till that number.

Input : 21

Output : 1 1 2 3 5 8 13 21

```
function Fibonacci(num:number)
{
    var no1=0,no2=1,no3:number=0,i=0;
    console.log(no1);
    console.log(no2);
    while(no3<num)
    {
        no3=no1 + no2;
        no1=no2;
        no2=no3;
        console.log(no3);
    }
}
```

Fibonacci(21);



The screenshot shows a Windows command prompt window titled "C:\Windows\system32\cmd.exe". The user has entered the following commands and received the corresponding output:

```
D:\Angular\Assignment1>tsc 5_Ass1.ts
D:\Angular\Assignment1>node 5_Ass1.js
0
1
1
2
3
5
8
13
21
D:\Angular\Assignment1>_
```

The output displays the Fibonacci series for the input 21, starting with 0 and 1, and continuing up to 21.