Web Development -Assignment-01

```
/**
 * 1. Write a typescript program which contains one function named as Maximum.
That function accepts three parameters and it should returns largest value from the three input parameters.

Input:   23   89  6
Output:  Maximum number is 89
 */

function maximum(num1: number, num2:number, num3: number):number
{
   var max : number = 0;
   if (num1 > num2)
   {
      max = num1;
   }
   else
   {
      max = num2;
   }

   if(num3 > max)
   {
      max = num3;
   }

   return max;
```

```
}

var num1 : number = 23;
var num2 : number = 89;
var num3 : number = 6;

console.log("Input "+num1+"  "+num2+"  "+num3);
console.log("maximum number is "+maximum(num1,num2, num3));



/**
 * Input 23  89  6
maximum number is 89
 */



/**
 * 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) : number
{
```

```
    var ans : number ;
    var PI : number = 3.14;

    ans = PI * radius * radius;

    return ans;
}

var radius : number = 5;

console.log("Input "+radius);
console.log("Area of circle is "+area(radius));

/**
 * Input 5
Area of circle is 78.5
 */



/**
 * 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 displayFactorial(val: number)
{
    var iCnt: number = 1;
```

```
   while(iCnt <= (val/2))
   {
      if ( val % iCnt == 0)
      {
         //console.log(iCnt);
         // I deliberately usesd this cause console.log was printing each output on new line
         process.stdout.write(""+iCnt);
         process.stdout.write("  ");
      }
      iCnt++;
   }

}

var num1 : number = 20 ;

console.log("Input "+num1);

console.log("Output  = ")

displayFactorial(num1);
//displayFactorial(num1)

/**
 * Input 20
Output  =
1  2  4  5  10
 */
```

```
/**
 * 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(val: number): boolean
{

    var iCnt : number = 2;
    var flag : boolean = false;
    while((val/2) > iCnt)
    {

      if(val % iCnt == 0)
      {
        return flag;

      }
      iCnt++;
    }
    flag = true;
    return flag;

}
```

```
var a : number = 11;


if(chkPrime(a))
{
   console.log("It is a prime number");
}
else{
   console.log("Not ");
}

/**
 * It is a prime number
 */




/**
 * 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.
21

Input :  21
Output: 1  1   2  3  5   8  13  21
 */

function Fibonacci(val : number)
{
   var n1 : number = 1;
```

```
    var n2 : number = 0;
    var ans : number = 0;
    while(n2 < val)
    {
        if(n1 == 0)
        {

        }
        else
        {
            console.log(n2);
        }
        ans = n1 + n2;
        n2 = n1;
        n1 = ans;

    }
}

var num : number = 21;

Fibonacci(num);

/**
 * 0
1
1
2
3
5
8
```

13

*/