

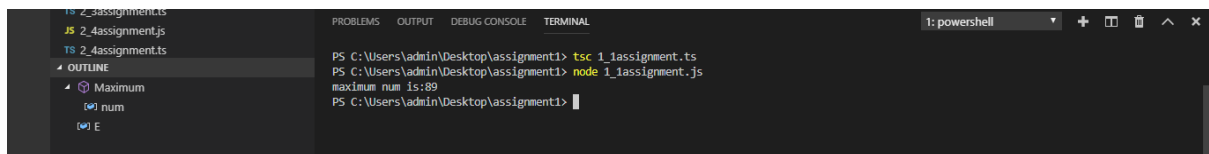
Assignment:1

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.

Ans:

```
function Maximum(a,b,c)
{
    var num=Math.max(a,b,c);
    console.log("maximum num is:"+num);
}
var E=Maximum(23,89,6);
```

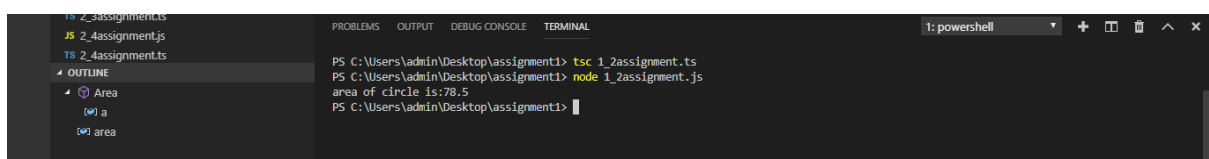


2. Write a typescript program which contains one function named as Area. That function should calculate area of circle. Accept value of radius from user and return its area. Default value of PI should be 3.14 if it is not provided by the caller.

Ans:

```
function Area(r:number,pi:number=3.14)
{
    var a=pi*r*r;
    return a;
}
var area=Area(5);

console.log("area of circle is:"+area);
```

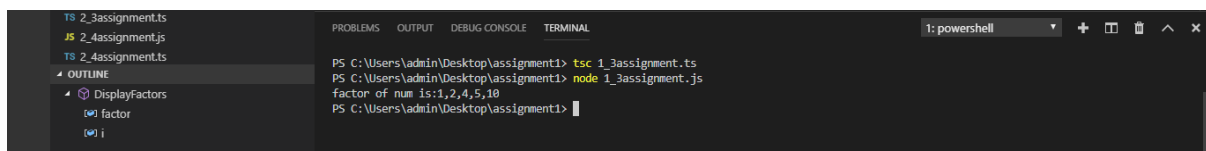


3. Write a typescript program which contains one function named as DisplayFactors. That function should accept one number and display factors of that number.

Ans:

```
function DisplayFactors(a)
{
    var i;
    var factor=[];
    for(i=1;i<a;i++)
    {
        if(a%i==0)
        {
            factor.push(i);
        }
    }
    return factor;
}

console.log("factor of num is:"+DisplayFactors(20));
```



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.

Ans:

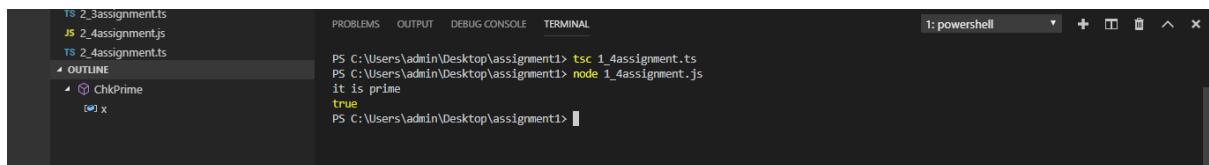
```

function ChkPrime(n)
{
    for(var x = 2; x < n; x++)
    {
        if(n % x === 0)
        {
            console.log("its not prime");
            return false;
        }
    }

    console.log("it is prime");
    return true;
}

console.log(ChkPrime(11));

```



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.

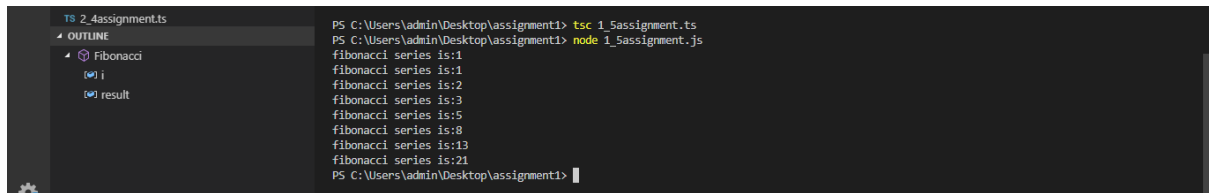
Ans:

```

function Fibonacci(x:number,a:number=0,b:number=1){
    var i;
    var result:number;
    result=b;
    for(i=13;i<x;i++)
    {
        console.log("fibonacci series is:"+result);
        result=a+b;
        a=b;
        b=result;
    }
}

```

```
}  
  
}  
  
Fibonacci(21);
```



The screenshot shows a code editor on the left with a file named 'TS 2_assignment.ts'. The editor has an 'OUTLINE' pane on the left showing a 'Fibonacci' function with parameters 'i' and 'result'. The main editor area shows the following code:

```
PS C:\Users\admin\Desktop\assignment1> tsc 1_5assignment.ts  
PS C:\Users\admin\Desktop\assignment1> node 1_5assignment.js  
fibonacci series is:1  
fibonacci series is:1  
fibonacci series is:2  
fibonacci series is:3  
fibonacci series is:5  
fibonacci series is:8  
fibonacci series is:13  
fibonacci series is:21  
PS C:\Users\admin\Desktop\assignment1>
```

The terminal output shows the execution of the program, which prints the Fibonacci series for the first 10 terms (1 to 21). The output is as follows:

```
fibonacci series is:1  
fibonacci series is:1  
fibonacci series is:2  
fibonacci series is:3  
fibonacci series is:5  
fibonacci series is:8  
fibonacci series is:13  
fibonacci series is:21
```