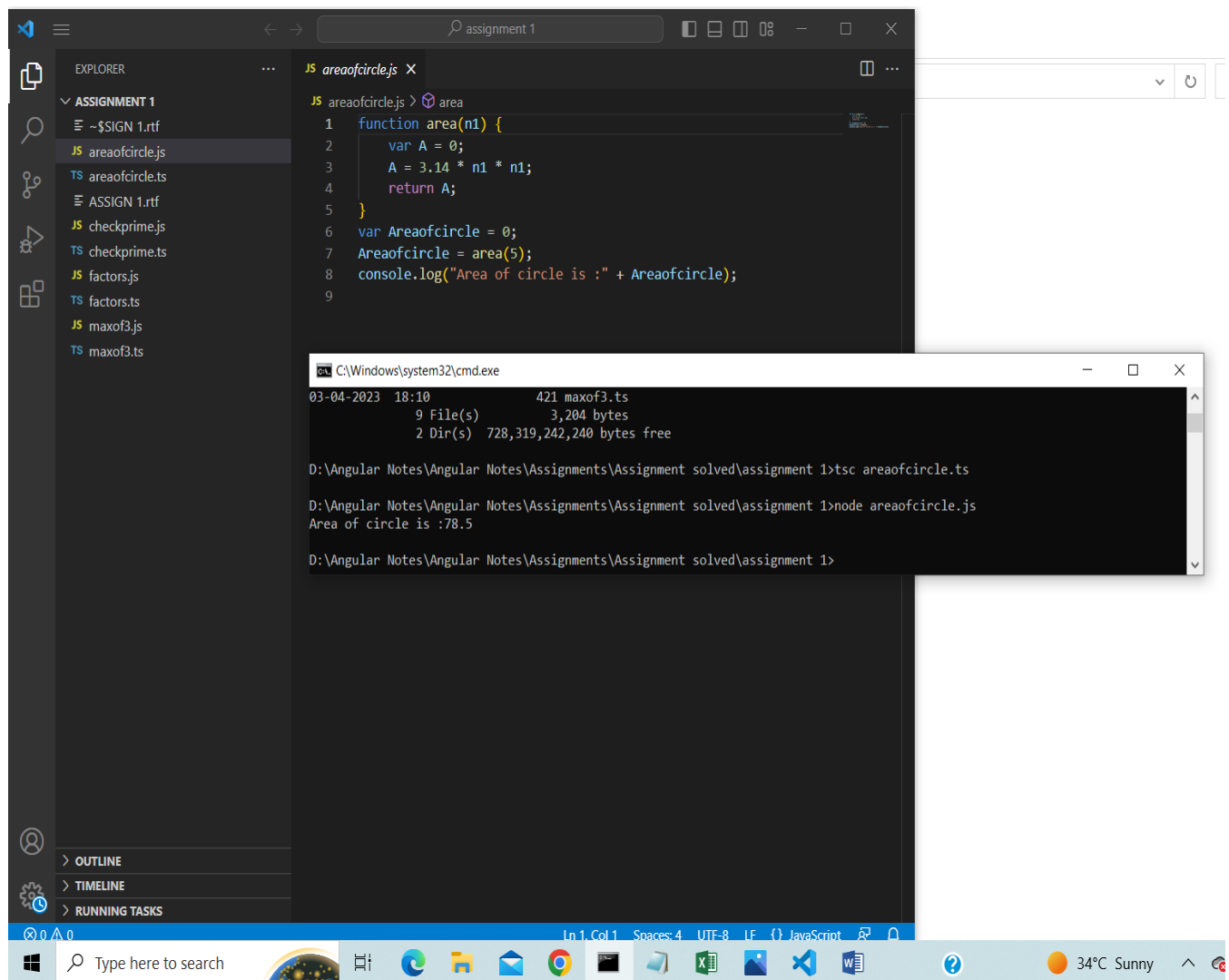


Q1 . Area of Circle



The screenshot shows a development environment with VS Code and a Windows Command Prompt. In VS Code, the file explorer on the left shows a project named 'ASSIGNMENT 1' containing several JavaScript and TypeScript files. The main editor displays 'areaofcircle.js' with the following code:

```
1 function area(n1) {  
2     var A = 0;  
3     A = 3.14 * n1 * n1;  
4     return A;  
5 }  
6 var Areaofcircle = 0;  
7 Areaofcircle = area(5);  
8 console.log("Area of circle is :" + Areaofcircle);  
9
```

The Command Prompt window shows the execution of the code:

```
C:\Windows\system32\cmd.exe  
03-04-2023 18:10 421 maxof3.ts  
9 File(s) 3,204 bytes  
2 Dir(s) 728,319,242,240 bytes free  
  
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>tsc areaofcircle.ts  
  
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>node areaofcircle.js  
Area of circle is :78.5  
  
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>
```

Q2 Check Prime Number

```
function isPrime(num) {  
    if (num <= 1) {  
        return false;  
    }  
    for (var i = 2; i <= Math.sqrt(num); i++) {  
        if (num % i === 0) {  
            return false;  
        }  
    }  
    return true;  
}
```

```

var userInput = 17; // replace with user input
if (isPrime(userInput)) {
    console.log(`${userInput} is a prime number`);
}
else {
    console.log(`${userInput} is not a prime number`);
}
function primo(num) {
    if (num <= 1) {
        return false;
    }
    for (var i = 2; i <= Math.sqrt(num); i++) {
        if (num % i === 0) {
            return false;
        }
    }
    return true;
}
var UIP = 11;
if (primo(UIP)) {
    console.log(`${UIP} is a prime number`);
}
else {
    console.log(`${UIP} is a not a prime number`);
}

```

OutPut:

```

9
C:\Windows\system32\cmd.exe
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>tsc checkprime.ts
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>node checkprime.js
11 is a prime number
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>

```

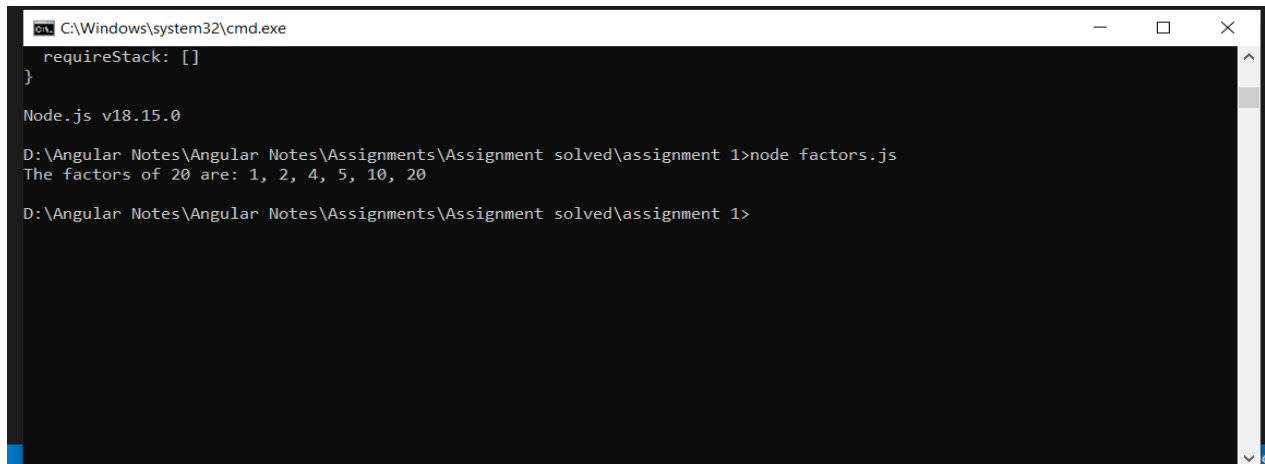
Q3. Show factors:

```
function Factors(num: number): number[]
{
    const factors: number[] = [];

    for (let i = 1; i <= num; i++) {
        if (num % i === 0) {
            factors.push(i);
        }
    }
    return factors;
}

const num = 20;
const factor = Factors(num);
console.log(`The factors of ${num} are: ${factor.join(", ")}`);
```

Output:



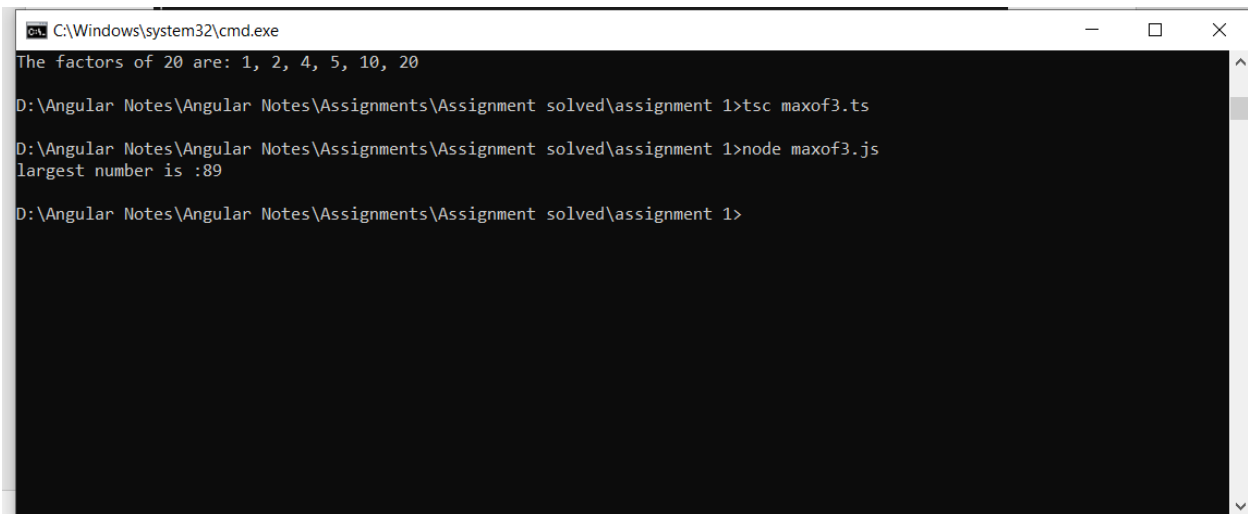
```
C:\Windows\system32\cmd.exe
requireStack: []
}
Node.js v18.15.0
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>node factors.js
The factors of 20 are: 1, 2, 4, 5, 10, 20
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>
```

Q4. Maximum number:

```
function Maximum(n1 : number, n2 : number, n3 : number) : void
{
    if(n1>n2 && n1>n3) {
        console.log("largest number is :" + n1)
    }
    else if (n2>= n1 && n2 >= n3) {
        console.log("largest number is :" + n2)
    }
}
```

```
    }  
    else {  
        console.log("largest number is :" + n3)  
    }  
}  
  
var A : number = 23  
var B : number = 89  
var C : number = 6  
  
Maximum(A,B,C);
```

Output:



```
C:\Windows\system32\cmd.exe  
The factors of 20 are: 1, 2, 4, 5, 10, 20  
  
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>tsc maxof3.ts  
  
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>node maxof3.js  
largest number is :89  
  
D:\Angular Notes\Angular Notes\Assignments\Assignment solved\assignment 1>
```