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

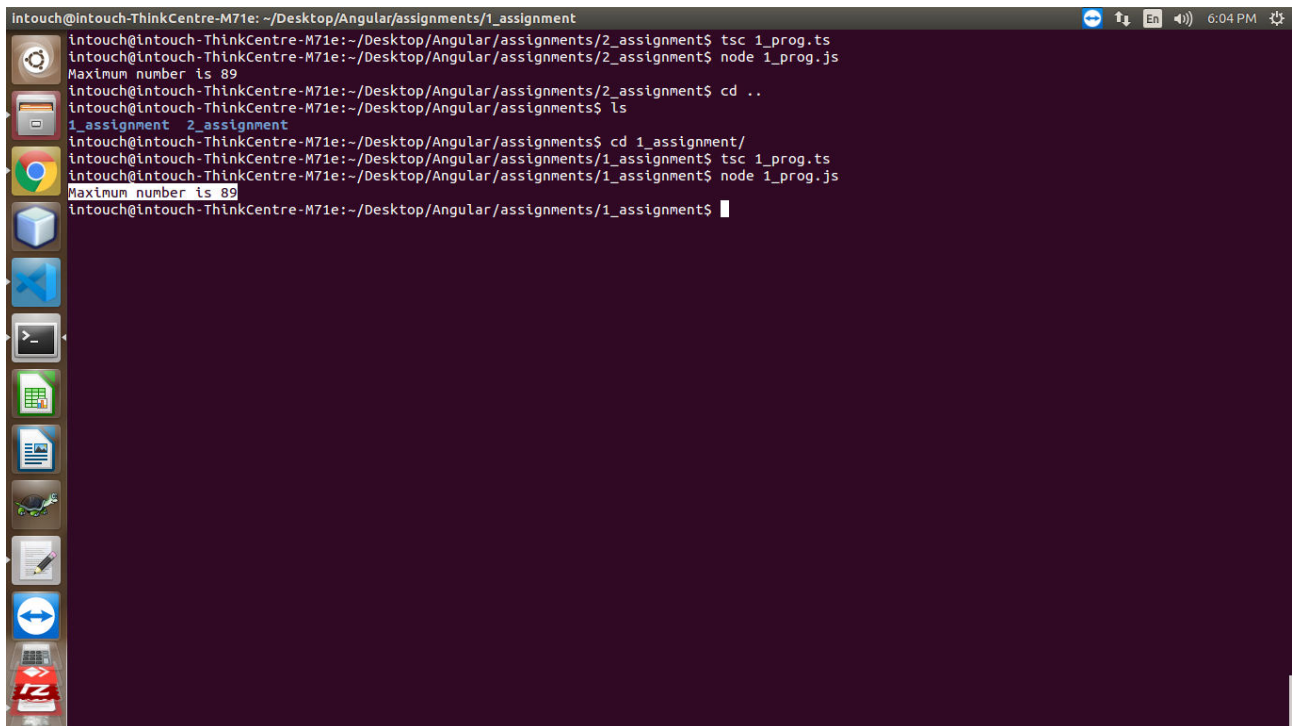
three parameters and it should returns largest value from three input parameters.

Input :23 89 6

Output :Maximum number is 89

\*/

```
function Maximum(no1:number, no2:number, no3:number):number{
    var maxnum:number;
    if(no1>no2){
        if(no1>no3){
            maxnum = no1;
        }else{
            maxnum = no3;
        }
    }else{
        if(no2>no3){
            maxnum = no2;
        }else{
            maxnum = no3;
        }
    }
    return maxnum;
}
console.log("Maximum number is "+Maximum(23,89,6));
```



```
intouch@intouch-ThinkCentre-M71e: ~/Desktop/Angular/assignments/1_assignment
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ tsc 1_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ node 1_prog.js
Maximum number is 89
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ cd ..
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ ls
1_assignment 2_assignment
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ cd 1_assignment/
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 1_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 1_prog.js
Maximum number is 89
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$
```

Output:-

/\*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

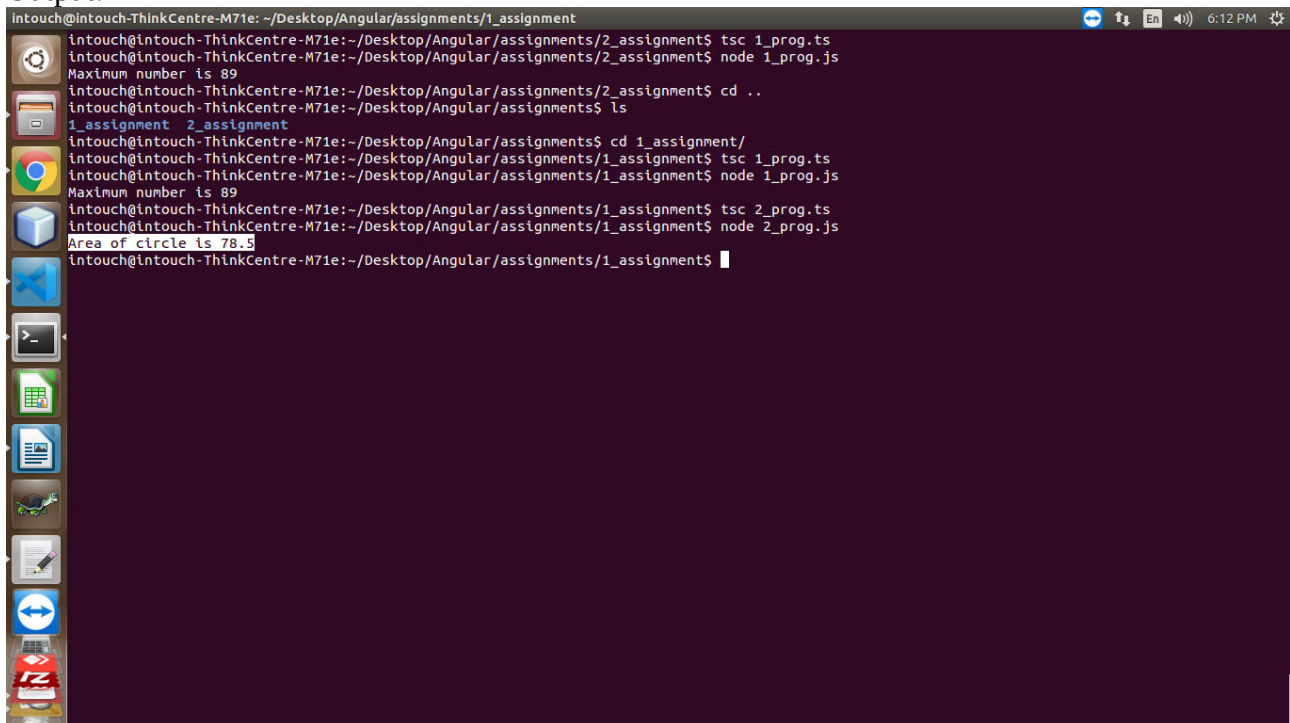
Output : Area of circle is 78.5

\*/

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

```
console.log("Area of circle is "+Area(5));
```

Output:



```
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intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ node 1_prog.js  
Maximum number is 89  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ cd ..  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ ls  
1_assignment 2_assignment  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ cd 1_assignment/  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 1_prog.ts  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 1_prog.js  
Maximum number is 89  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 2_prog.ts  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 2_prog.js  
Area of circle is 78.5  
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$
```

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

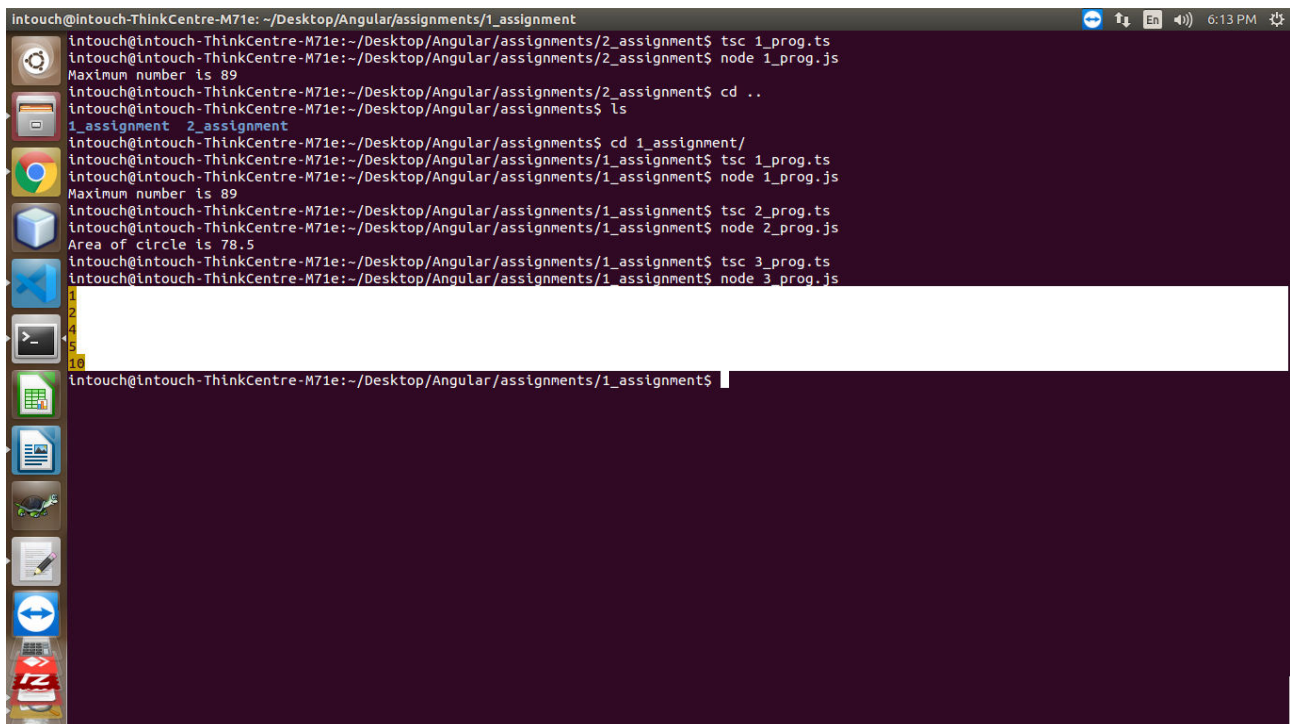
Input : 20

Output :

1  
2  
4  
5  
10  
\*/

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

DisplayFactors(20);

A screenshot of a terminal window on a Linux system. The terminal shows the following sequence of commands and outputs:  
1. Command: `tsc 1_prog.ts`  
2. Command: `node 1_prog.js`  
 Output: `Maximum number is 89`  
3. Command: `cd ..`  
4. Command: `ls`  
 Output: `1_assignment 2_assignment`  
5. Command: `cd 1_assignment/`  
6. Command: `tsc 1_prog.ts`  
7. Command: `node 1_prog.js`  
 Output: `Maximum number is 89`  
8. Command: `tsc 2_prog.ts`  
9. Command: `node 2_prog.js`  
 Output: `Area of circle is 78.5`  
10. Command: `tsc 3_prog.ts`  
11. Command: `node 3_prog.js`  
 Output: `1  
2  
4  
5  
10`  
The terminal window has a dark purple background and a light-colored sidebar on the left with various application icons. The top of the window shows the system tray with icons for network, volume, and battery, along with the time 6:13 PM.

Output:-

/\*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 halfno = no/2;
    if(no==0 || no==1){
        return false;
    }else{
        for(var i=2; i<=halfno; i++){
            if(halfno % i == 0){
                return false;
            }
        }
    }
    return true;
}
```

```
var flag = ChkPrime(11);
if(flag == true){
    console.log("It is prime number");
}else{
    console.log("It is not prime number");
}
```

Output:-

```
intouch@intouch-ThinkCentre-M71e: ~/Desktop/Angular/assignments/1_assignment
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ tsc 1_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ node 1_prog.js
Maximum number is 89
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ cd ..
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ ls
1_assignment 2_assignment
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ cd 1_assignment/
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 1_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 1_prog.js
Maximum number is 89
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 2_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 2_prog.js
Area of circle is 78.5
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 3_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 3_prog.js
1
2
4
5
10
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 4_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 4_prog.js
It is prime number
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$
```

/\*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(no:number){
    var a:number = 0;
    var b:number = 1;
    var c:number = 1;
    for(var i=1; a<no; i++){
        a=b;
        b=c;
        c=a+b;
        console.log(a);
    }
}
```

Fibonacci(21);

## Output:-

```
intouch@intouch-ThinkCentre-M71e: ~/Desktop/Angular/assignments/1_assignment
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ tsc 1_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ node 1_prog.js
Maximum number is 89
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/2_assignment$ cd ..
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ ls
1_assignment 2_assignment
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments$ cd 1_assignment/
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 1_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 1_prog.js
Maximum number is 89
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 2_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 2_prog.js
Area of circle is 78.5
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 3_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 3_prog.js
1
2
4
5
10
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 4_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 4_prog.js
It is prime number
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ tsc 5_prog.ts
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$ node 5_prog.js
1
1
2
2
3
3
5
5
8
8
13
13
21
intouch@intouch-ThinkCentre-M71e:~/Desktop/Angular/assignments/1_assignment$
```