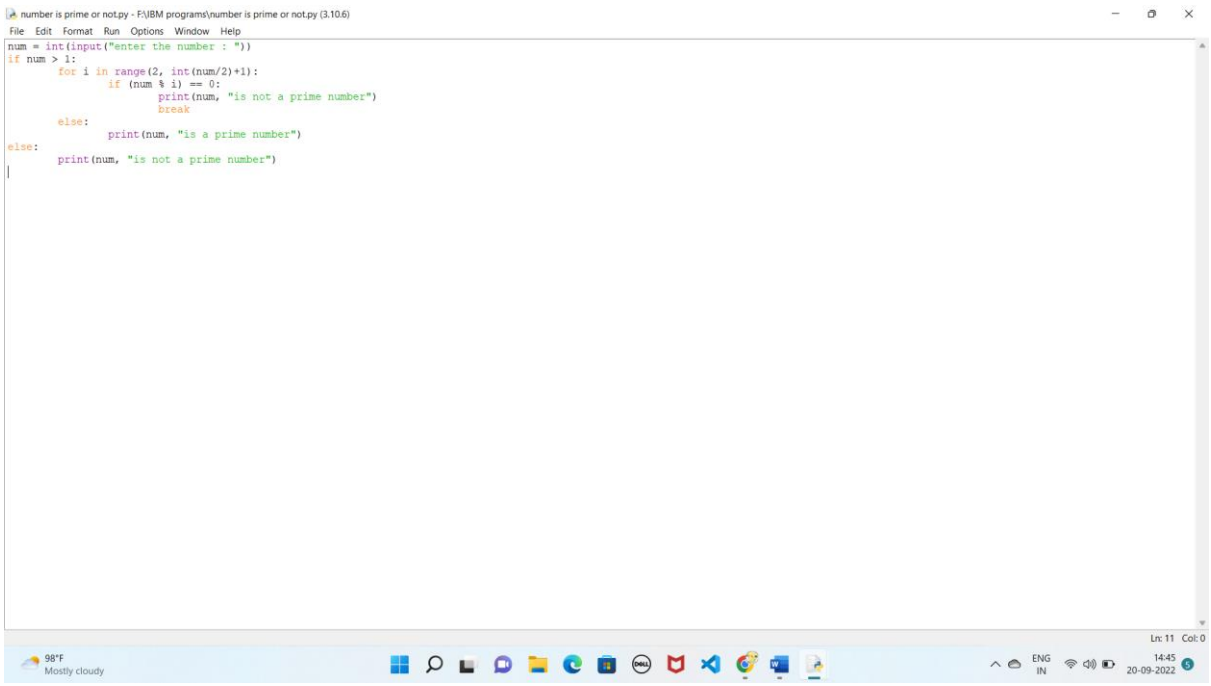
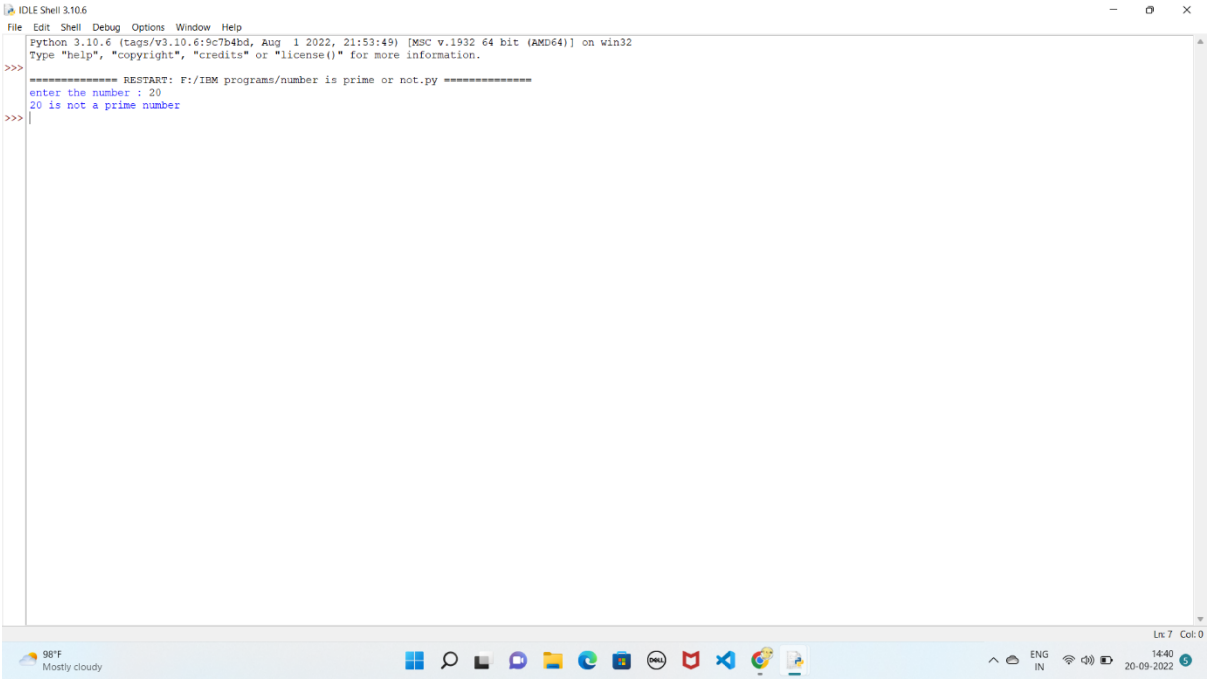
1.Write a python program to test a given number is prime or not.

```
num = int(input("enter the number : "))
if num > 1:
        for i in range(2, int(num/2)+1):
                if (num % i) == 0:
                        print(num, "is not a prime number")
                        break
        else:
                print(num, "is a prime number")
else:
        print(num, "is not a prime number")
```

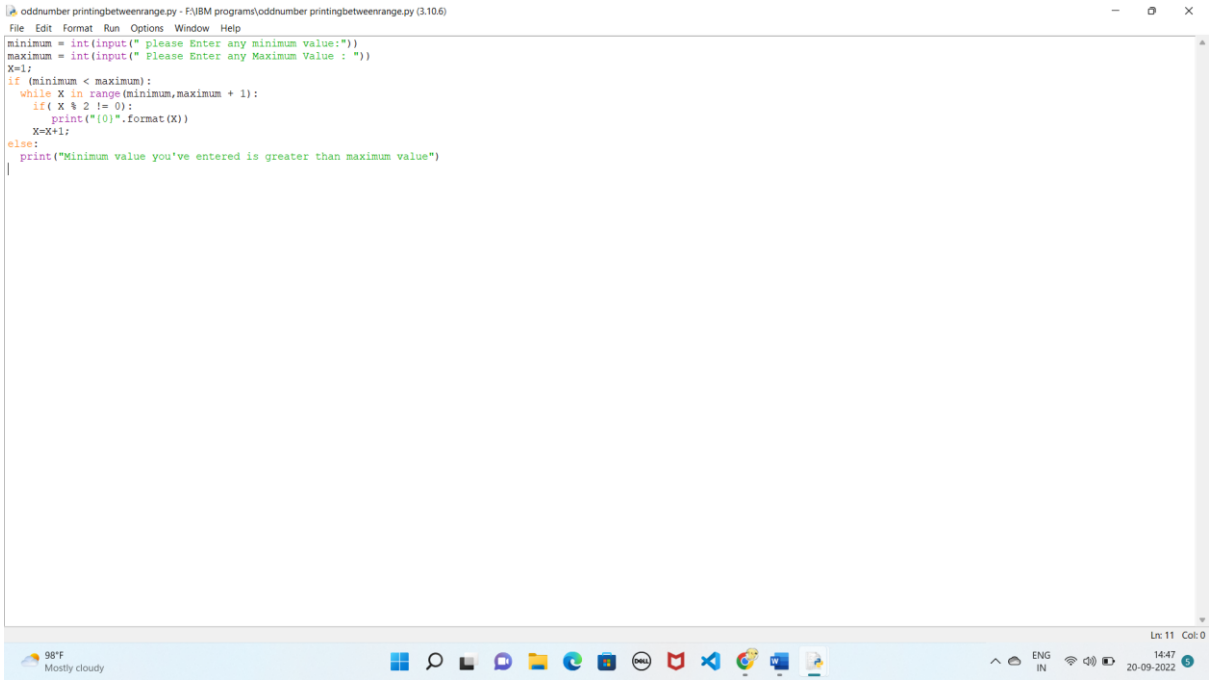


Output:

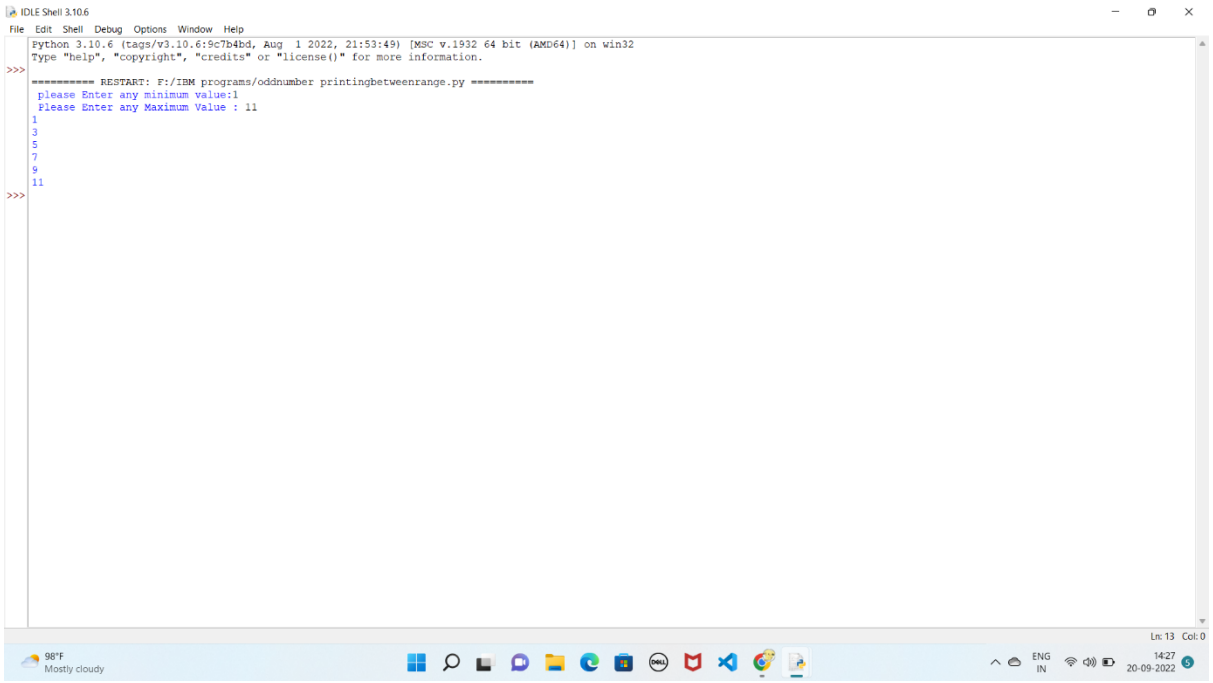


2.write a program to generate odd numbers from m to n using while loop.

```
minimum = int(input(" please Enter any minimum value:"))
maximum = int(input(" Please Enter any Maximum Value : "))
X=1;
if (minimum < maximum):
  while X in range(minimum,maximum + 1):
    if( X % 2 != 0):
      print("{0}".format(X))
    X=X+1;
else:
  print("Minimum value you've entered is greater than maximum value")
```



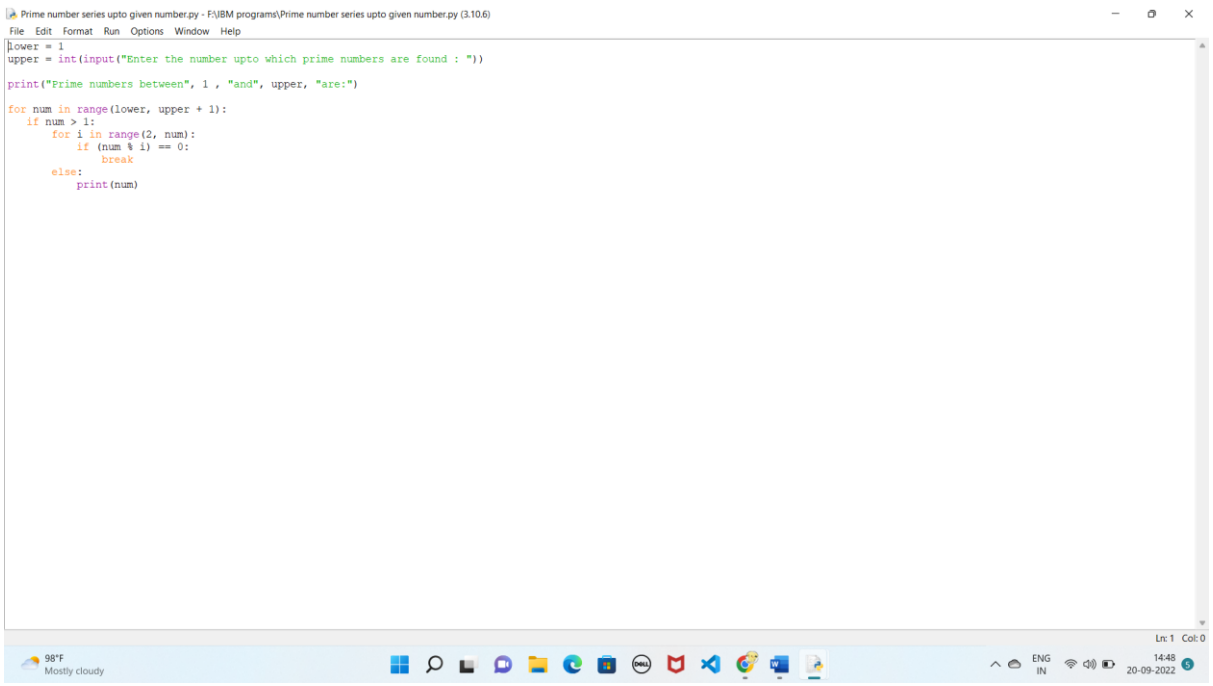
Output:



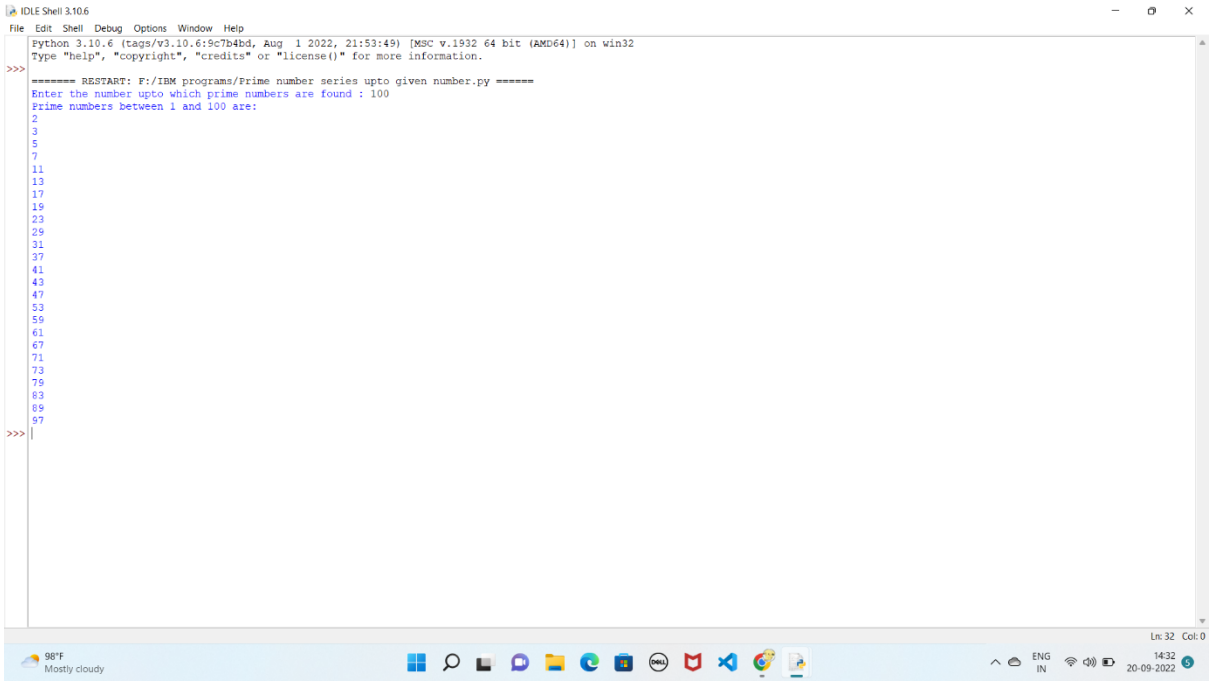
3.Write a python program to display prime number series up to given number.

```
lower = 1

upper = int(input("Enter the number upto which prime numbers are found : "))

print("Prime numbers between", 1 , "and", upper, "are:")

for num in range(lower, upper + 1):
```

```
if num > 1:
    for i in range(2, num):
        if (num % i) == 0:
            break
    else:
        print(num)
```

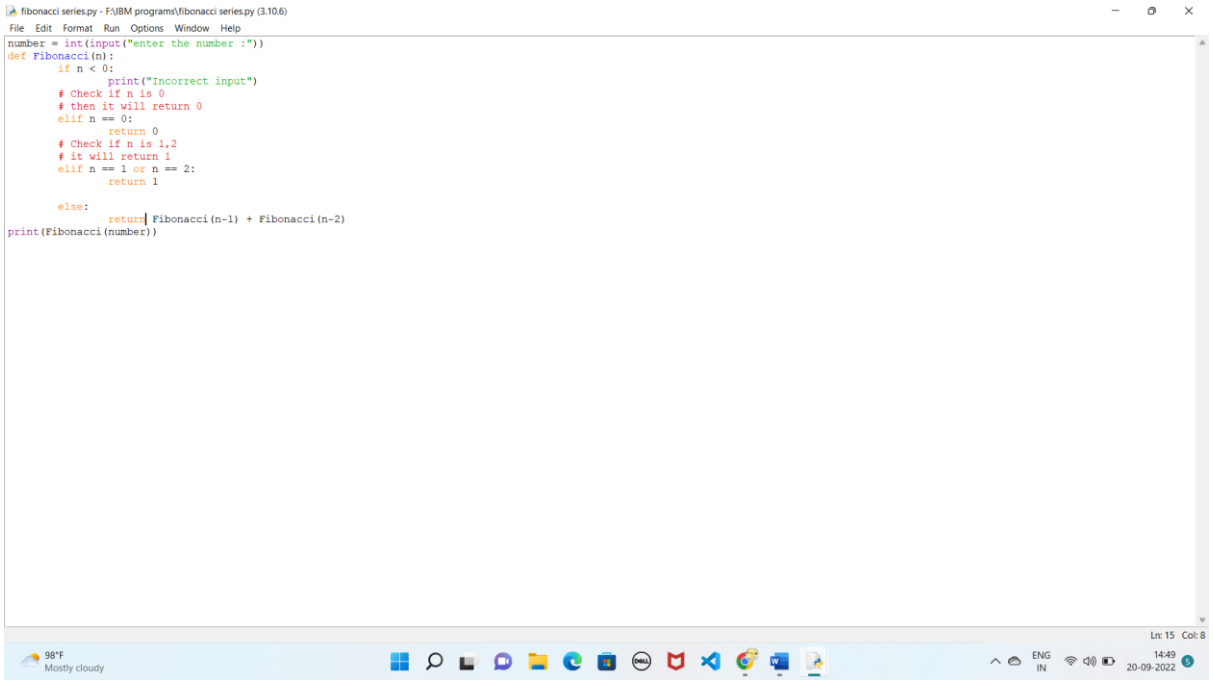


Output:

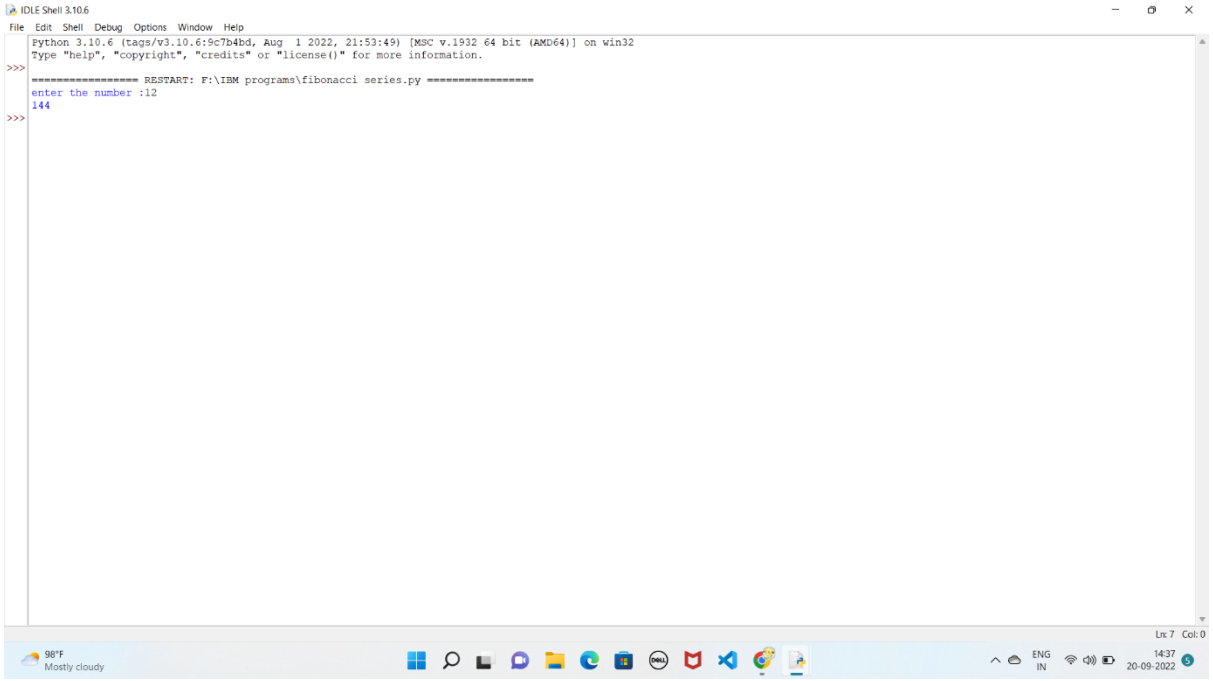


4.write a python program to generate Fibonacci Series.

```
number = int(input("enter the number :"))
def Fibonacci(n):
        if n < 0:
                print("Incorrect input")
        # Check if n is 0
        # then it will return 0
        elif n == 0:
                return 0
        # Check if n is 1,2
        # it will return 1
        elif n == 1 or n == 2:
                return 1


        else:
                return Fibonacci(n-1) + Fibonacci(n-2)
print(Fibonacci(number))
```


fibonacci series.py - F:\IBM programs\fibonacci series.py (3.10.6)
File Edit Format Run Options Window Help
number = int(input("enter the number :"))
def Fibonacci(n):
if n < 0:
print("Incorrect input")
# Check if n is 0
# then it will return 0
elif n == 0:
return 0
# Check if n is 1,2
# it will return 1
elif n == 1 or n == 2:
return 1
else:
return Fibonacci(n-1) + Fibonacci(n-2)
print(Fibonacci(number))
Ln: 15 Col: 8
98°F
Mostly cloudy
ENG
IN
14:49
20-09-2022

Output:


IDLE Shell 3.10.6
File Edit Shell Debug Options Window Help
Python 3.10.6 (tags/v3.10.6:9c7b4bd, Aug 1 2022, 21:53:49) [MSC v.1932 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========== RESTART: F:\IBM programs\fibonacci series.py ==========
enter the number :12
144
>>>
Ln: 7 Col: 0
98°F
Mostly cloudy
ENG
IN
14:37
20-09-2022