

**Assignment -2**  
**Python Programming**

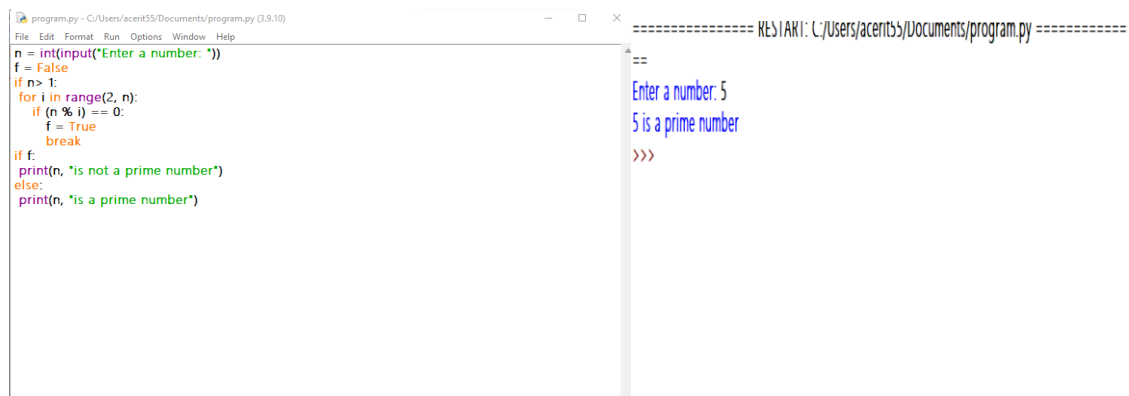
Assignment Date	19 September 2022
Student Name	PRIYADHARSHINI M
Student Roll Number	2116190701151
Maximum Marks	2 Marks

**Question-1:**

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

**Solution :**

```
n = int(input("Enter a
number: "))
f = False
if n > 1:
    for i in range(2, n):
        if (n % i) == 0:
            f = True
            break
if f:
    print(n, "is not a prime
number")
else:
    print(n, "is a prime
number")
```



The screenshot shows a Python IDE window titled 'program.py - C:/Users/acerit55/Documents/program.py (3.9.10)'. The code in the editor is the same as the solution provided. The output console on the right shows the execution: 'Enter a number: 5' followed by '5 is a prime number'.

**Question-2:**

Write a program to generate odd numbers from m to n using while loop

**Solution :**

```
min = int(input(" Enter any min value:"))
max = int(input(" Enter any max Value : "))
X=1;
if (min < max):
```

```

while X in range(min,max+ 1):
    if( X % 2 != 0):
        print("{0}".format(X))
        X=X+1;
else:
    print("min value you've entered is greater than max value")

```

The screenshot shows two windows from a Python IDE. The left window, titled 'program.py - C:/Users/acerit55/Documents/program.py (3.9.10)', contains the following code:

```

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

```

The right window, titled 'IDLE Shell 3.9.10', shows the execution output:

```

Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v.1929 64 bit (AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
===== RESTART: C:/Users/acerit55/Documents/program.py =====
>>>
Enter any min value:1
Enter any max Value : 10
1
3
5
7
9
>>>

```

### Question-3:

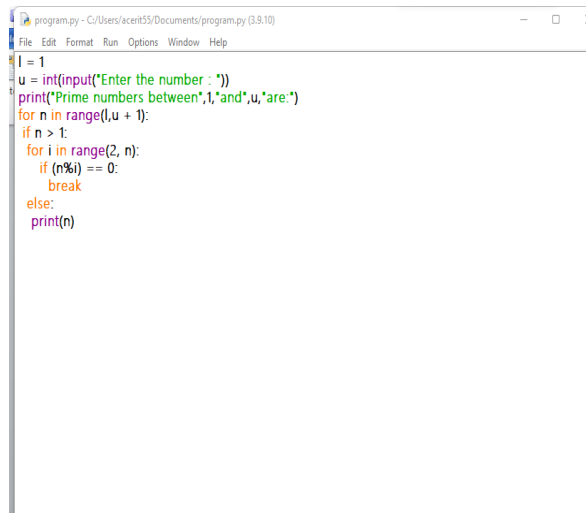
Write a Python program to display prime number series upto given number.

#### Solution :

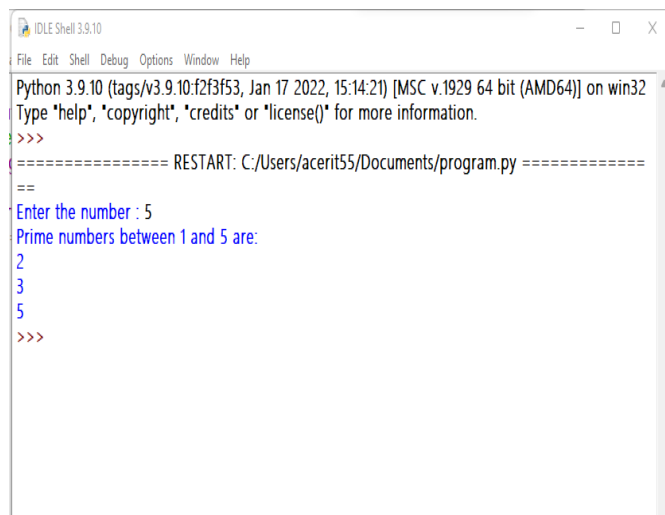
```

l = 1
u = int(input("Enter the number : "))
print("Prime numbers between",1,"and" ,u,"are:")
for n in range(l,u + 1):
    if n > 1:
        for i in range(2, n):
            if (n%i) == 0:
                break
        else:
            print(n)

```



```
program.py - C:/Users/acerit55/Documents/program.py (3.9.10)
File Edit Format Run Options Window Help
l = 1
u = int(input("Enter the number : "))
print("Prime numbers between",l,"and",u,"are:")
for n in range(l,u + 1):
    if n > 1:
        for i in range(2, n):
            if (n%i) == 0:
                break
        else:
            print(n)
```



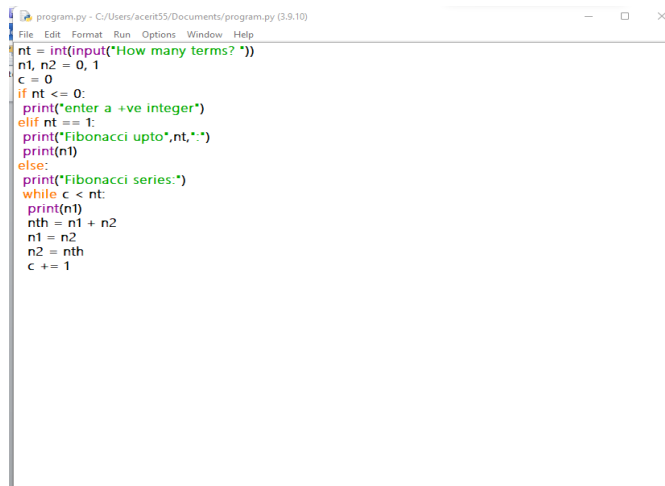
```
IDLE Shell 3.9.10
File Edit Shell Debug Options Window Help
Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v.1929 64 bit (AMD64)] on win32
Type 'help', 'copyright', 'credits' or 'license()' for more information.
>>>
===== RESTART: C:/Users/acerit55/Documents/program.py =====
==
Enter the number : 5
Prime numbers between 1 and 5 are:
2
3
5
>>>
```

#### Question-4:

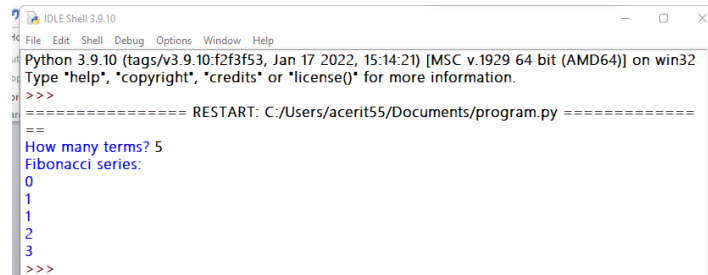
Write a Python program to generate Fibonacci series.

#### Solution :

```
nt = int(input("How many terms? "))
n1, n2 = 0, 1
c = 0
if nt <= 0:
    print("enter a +ve integer")
elif nt == 1:
    print("Fibonacci upto",nt,":")
    print(n1)
else:
    print("Fibonacci series:")
    while c < nt:
        print(n1)
        nth = n1 + n2
        n1 = n2
        n2 = nth
        c += 1
```



```
program.py - C:/Users/acerit55/Documents/program.py (3.9.10)
File Edit Format Run Options Window Help
nt = int(input("How many terms? "))
n1, n2 = 0, 1
c = 0
if nt <= 0:
    print("enter a +ve integer")
elif nt == 1:
    print("Fibonacci upto",nt,":")
    print(n1)
else:
    print("Fibonacci series:")
    while c < nt:
        print(n1)
        nth = n1 + n2
        n1 = n2
        n2 = nth
        c += 1
```



```
IDLE Shell 3.9.10
File Edit Shell Debug Options Window Help
Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v.1929 64 bit (AMD64)] on win32
Type 'help', 'copyright', 'credits' or 'license()' for more information.
>>>
===== RESTART: C:/Users/acerit55/Documents/program.py =====
>>>
How many terms? 5
Fibonacci series:
0
1
1
2
3
>>>
```