Assignment -3
Python Programming

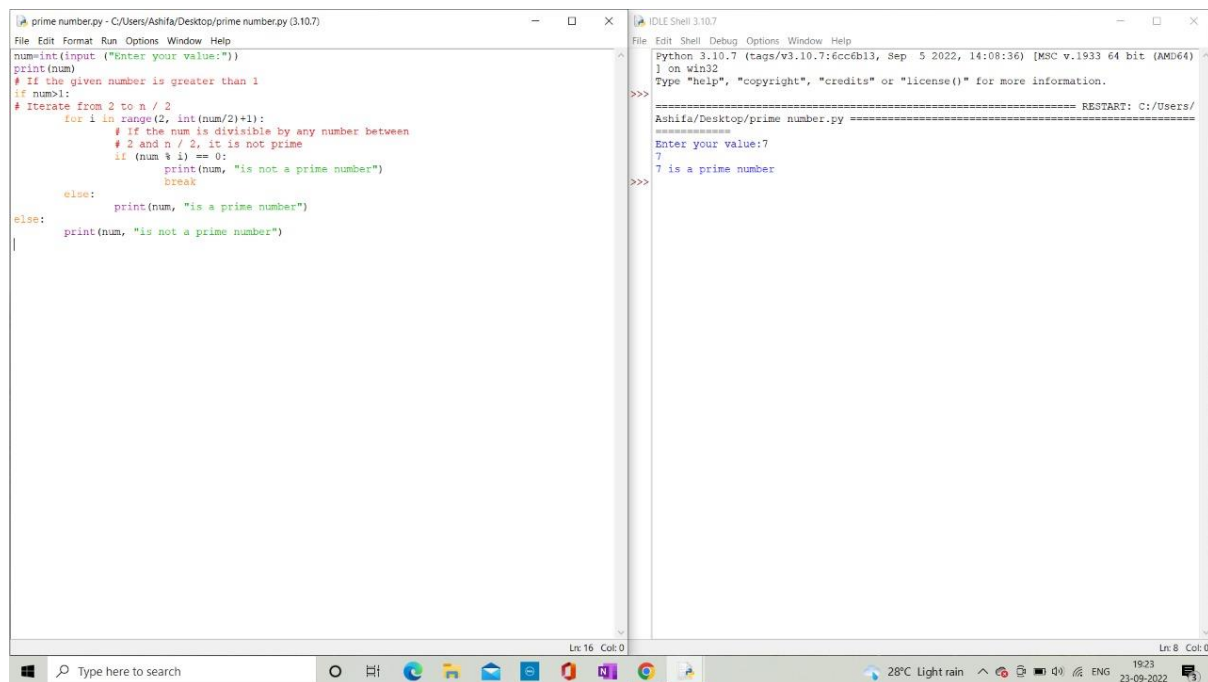| Assignment Date	19 September 2022
Student Name	MOHAMED THAHIR S
Student Roll Number	820419104034
Maximum Marks	2 Marks

Question-1:

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

Solution:

```
            num=int(input ("Enter your value:"))
            print(num)
# If given number is greater than 1
            if num>1:
     # Iterate from 2 to n / 2
                for i in range(2, int(num/2)+1):
            # If num is divisible by any number between
            # 2 and n / 2, it is not prime
                    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:

```
        Enter your value: 7
        7
        7 is a prime number.
```

```
num=int(input ("Enter your value:"))
print(num)
# If the given number is greater than 1
if num>1:
# Iterate from 2 to n / 2
    for i in range(2, int(num/2)+1):
        # If the num is divisible by any number between
        # 2 and n / 2, it is not prime
        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")
```

```
Python 3.10.7 (tags/v3.10.7:6cc6b13, Sep  5 2022, 14:08:36) [MSC v.1933 64 bit (AMD64)
] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
========================================================= RESTART: C:/Users/
Ashifa/Desktop/prime number.py =========================================================
Enter your value:7
7
7 is a prime number
>>>
```

Question-2:

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

Solution:
Python program to print odd Numbers

m=int(input("Enter the m value:"))
n=int(input("Enter the n value:"))

for num in range(m,n+1):

        while(num%2!=0):
          print(num)
          break

Output:
        Enter the m value:1
        Enter the n value:10
        1
        3
        5
        7
        9
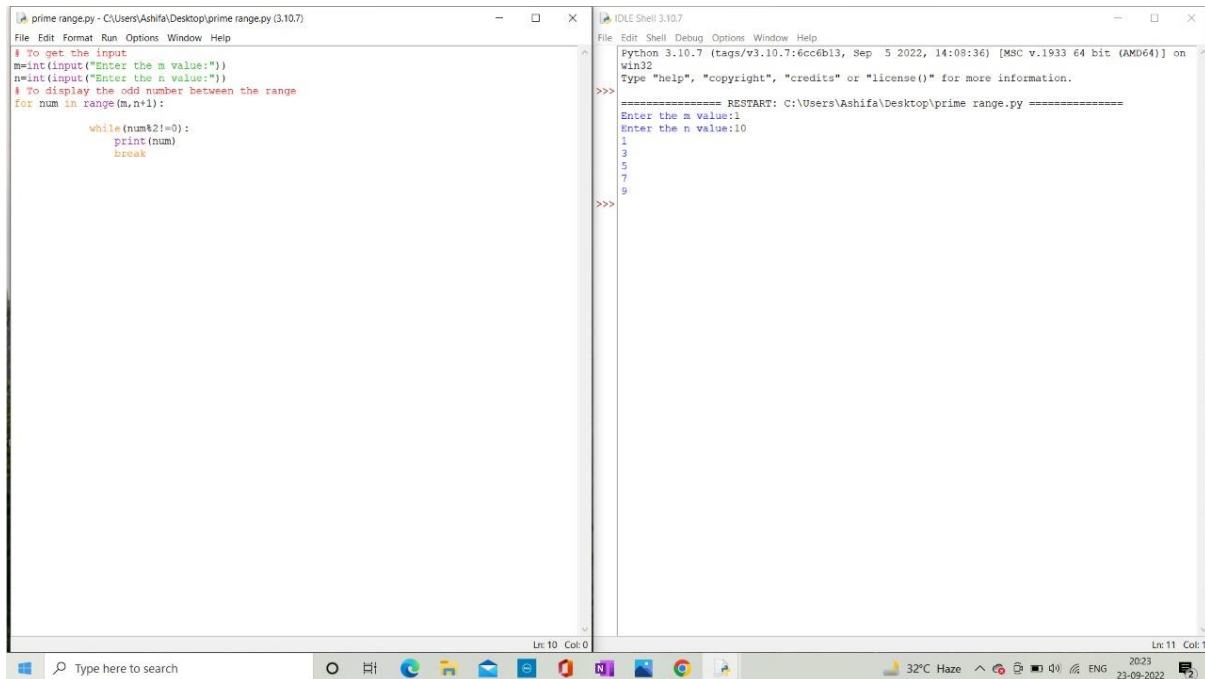
Question-3:

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

Solution:
Python program to display all the prime numbers within an interval

lower = int(input("Please Enter minimum value:"))
upper = int(input("Please Enter maximum value:"))

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

for num in range(lower, upper + 1):
  # all prime numbers are greater than 1
  if num > 1:
    for i in range(2, num):
      if (num % i) == 0:
        break
    else:
      print(num)
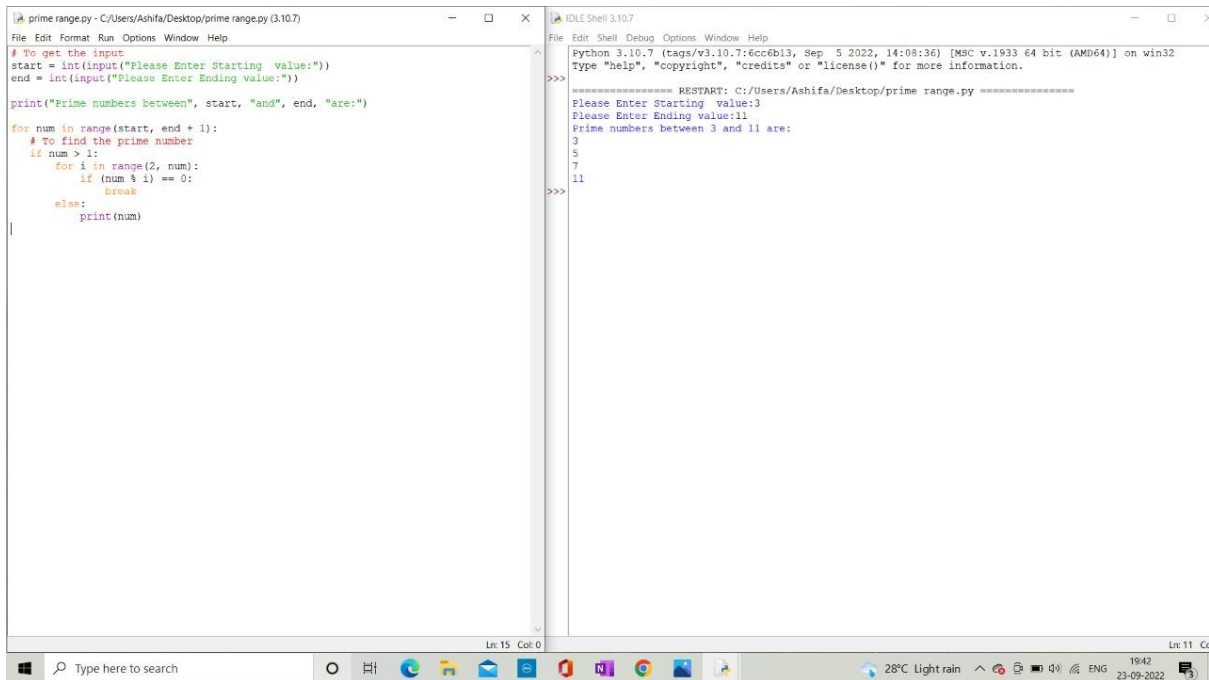
Output:
        Please Enter Starting Value:3
        Please Enter Ending Value:11
        Prime number between 3 and 11 are:
        3

```
     5
     7
    11
```


Question-4:

Write a python program to generate Fibonacci series.

Solution:
```python
# Program to display the Fibonacci sequence up to n-th term

nterms = int(input("How many terms? "))

# first two terms
n1, n2 = 0, 1
count = 0

# check if the number of terms is valid
if nterms <= 0:
   print("Please enter a positive integer")
# if there is only one term, return n1
elif nterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)
# generate fibonacci sequence
else:
   print("Fibonacci sequence:")
   while count < nterms:
      print(n1)
```

```
        nth = n1 + n2
        # update values
        n1 = n2
        n2 = nth
        count += 1
```

Output:
 Number of inputs:7
 Fibonacci series:
0
1
1
2
3
5
8