Assignment -4

Python Programming

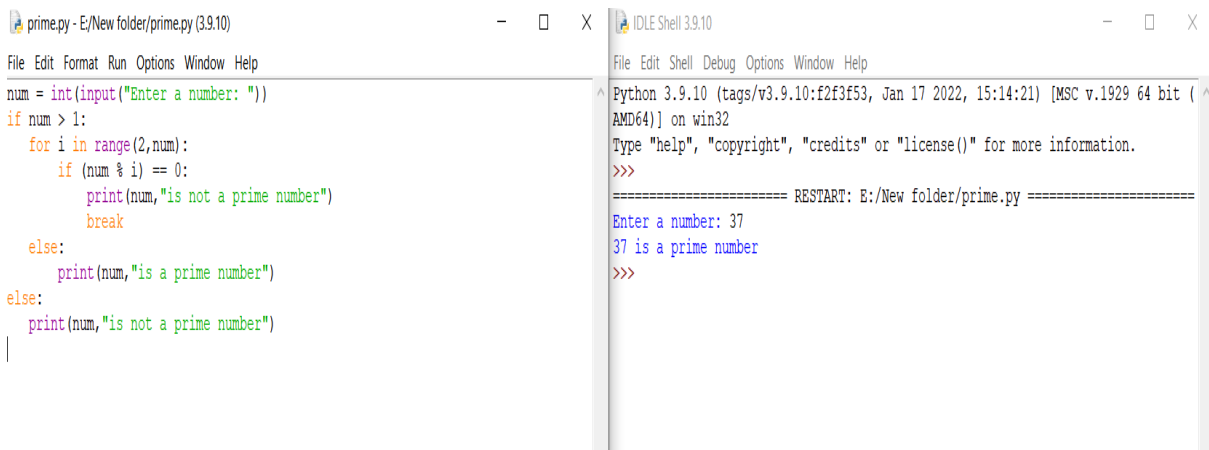| Assignment Date	19 September 2022
Student Name	S.Peararulselvi
Student Roll Number	820419104048
Maximum Marks	2 Marks

Question-1:

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

Solution:

```
num = int(input("Enter a number: "))
if num > 1:
  for i in range(2,num):
    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")
```

Question-2:

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

Solution:

```
m = int(input(" Please enter starting value:"))
n = int(input(" Please Enter any Maximum Value : "))
for number in range(m, n + 1):
    if(number % 2 != 0):
        print("{0}".format(number))
```


Question-3:

Write a Python program to display prime numbers series upto given number?

Solution:

```
lower = 2
upper = int(input("Enter the upper value:"))
for number in range(lower,upper+1):
    if number>1:
        for i in range(2,number):
            if (number%i)==0:
                break
        else:
            print(number)
```

```
lower = 2
upper = int(input("Enter the upper value:"))
for number in range(lower,upper+1):
    if number>1:
        for i in range(2,number):
            if (number%i)==0:
                break
        else:
            print(number)
```
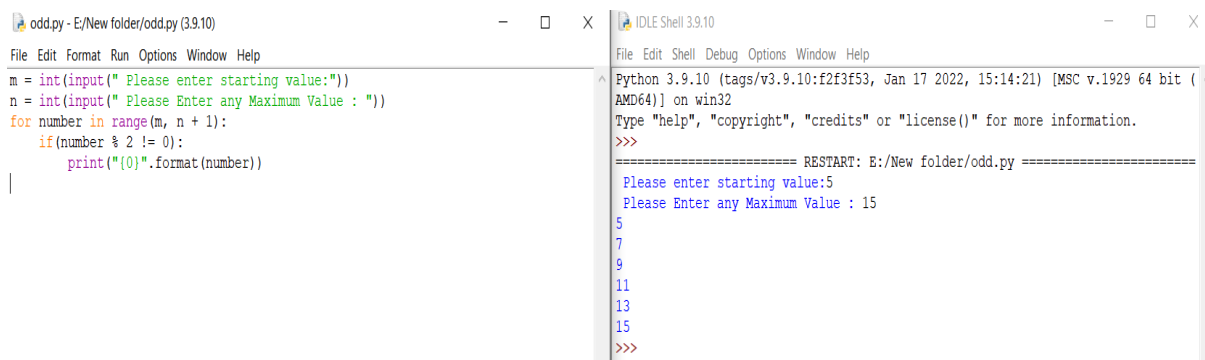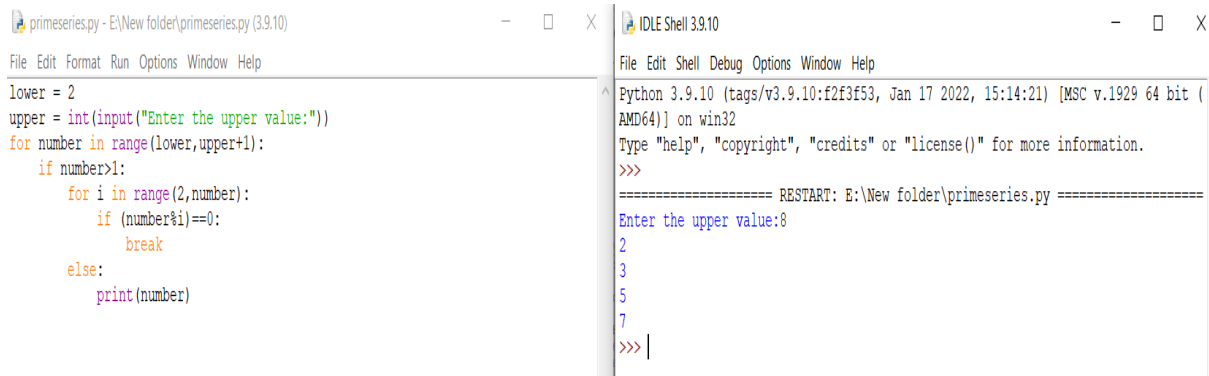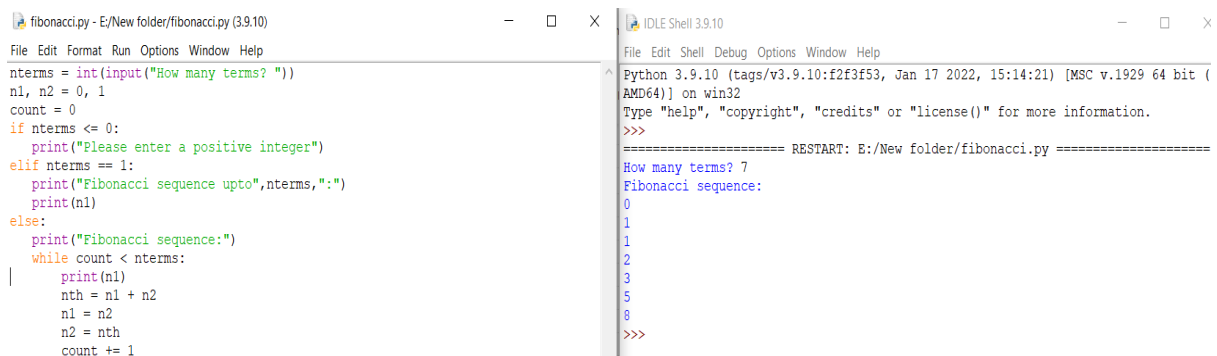
```
Python 3.9.10 (tags/v3.9.10:f2f3f53, Jan 17 2022, 15:14:21) [MSC v.1929 64 bit (
AMD64)] on win32
Type "help", "copyright", "credits" or "license()" for more information.
>>>
==================== RESTART: E:\New folder\primeseries.py ====================
Enter the upper value:8
2
3
5
7
>>>
```

Question-4:

Write a Python program to generate Fibonacci series?

Solution:

```
nterms = int(input("How many terms? "))
n1, n2 = 0, 1
count = 0
if nterms <= 0:
   print("Please enter a positive integer")
elif nterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)
else:
            print("Fibonacci sequence:")
   while count < nterms:
     print(n1)
     nth = n1 + n2
     n1 = n2
     n2 = nth
     count += 1
```

```
nterms = int(input("How many terms? "))
n1, n2 = 0, 1
count = 0
if nterms <= 0:
   print("Please enter a positive integer")
elif nterms == 1:
   print("Fibonacci sequence upto",nterms,":")
   print(n1)
else:
   print("Fibonacci sequence:")
   while count < nterms:
      print(n1)
      nth = n1 + n2
      n1 = n2
      n2 = nth
      count += 1
```

```
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: E:/New folder/fibonacci.py ====================
How many terms? 7
Fibonacci sequence:
0
1
1
2
3
5
8
>>>
```