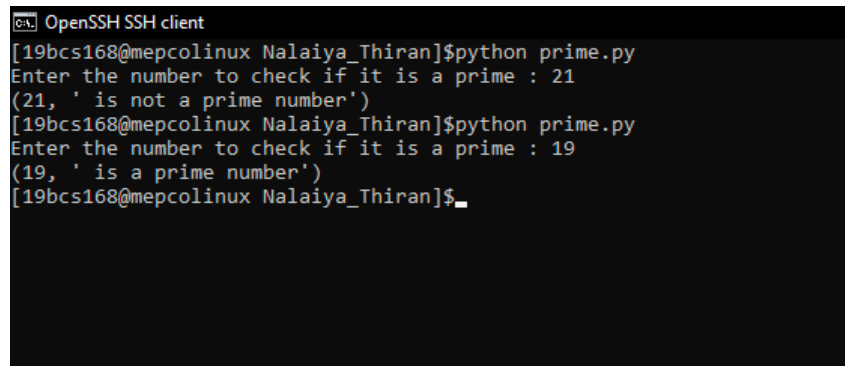


ASSIGNMENT – 1

1. Check whether a given number is prime or not :-

```
a = int(input("Enter the number to check if it is a prime : "))  
if a > 1:  
    for i in range(2, a):  
        if (a % i) == 0:  
            print(a, " is not a prime number")  
            break  
    else:  
        print(a, " is a prime number")  
else:  
    print(a, " is neither prime nor composite")
```

OUTPUT :-



```
C:\> OpenSSH SSH client  
[19bcs168@mepcolinux Nalaiya_Thiran]$python prime.py  
Enter the number to check if it is a prime : 21  
(21, ' is not a prime number')  
[19bcs168@mepcolinux Nalaiya_Thiran]$python prime.py  
Enter the number to check if it is a prime : 19  
(19, ' is a prime number')  
[19bcs168@mepcolinux Nalaiya_Thiran]$_
```

2. Generate odd number from m to n using while loop:

```
print("Finding odd numbers in a given range....")

m = int(input("From : "))

n = int(input("To :"))

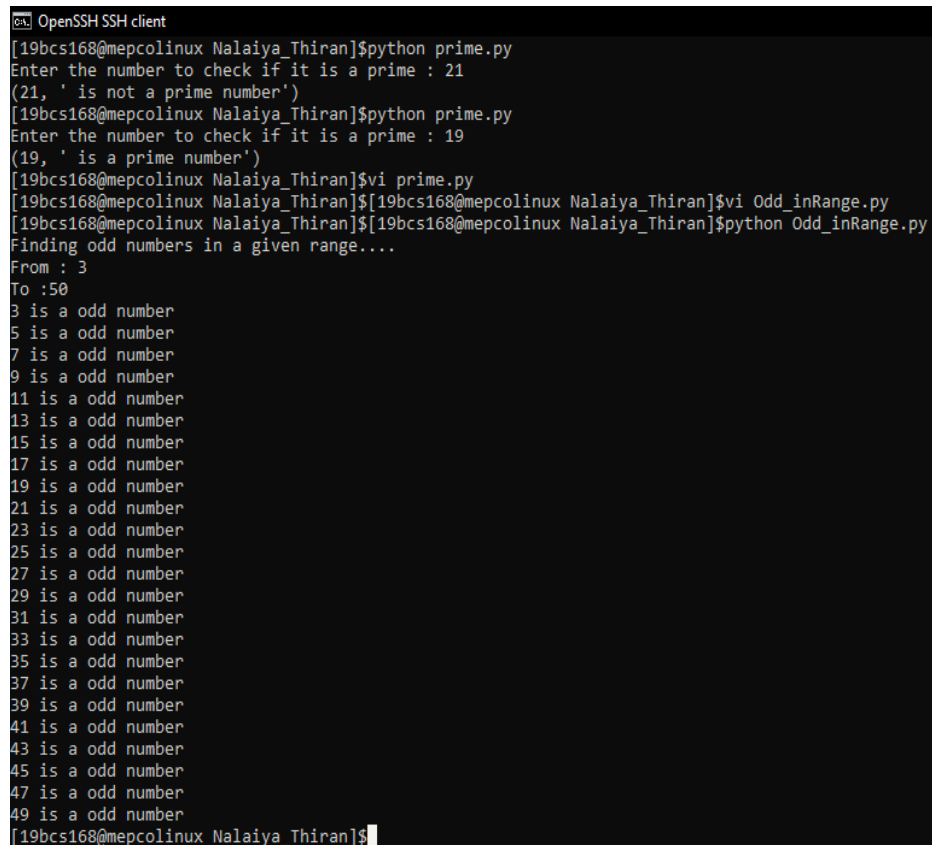
while m < n+1:

    if(m%2)!=0:

        print("{} is a odd number".format(m))

    m = m + 1
```

OUTPUT:-

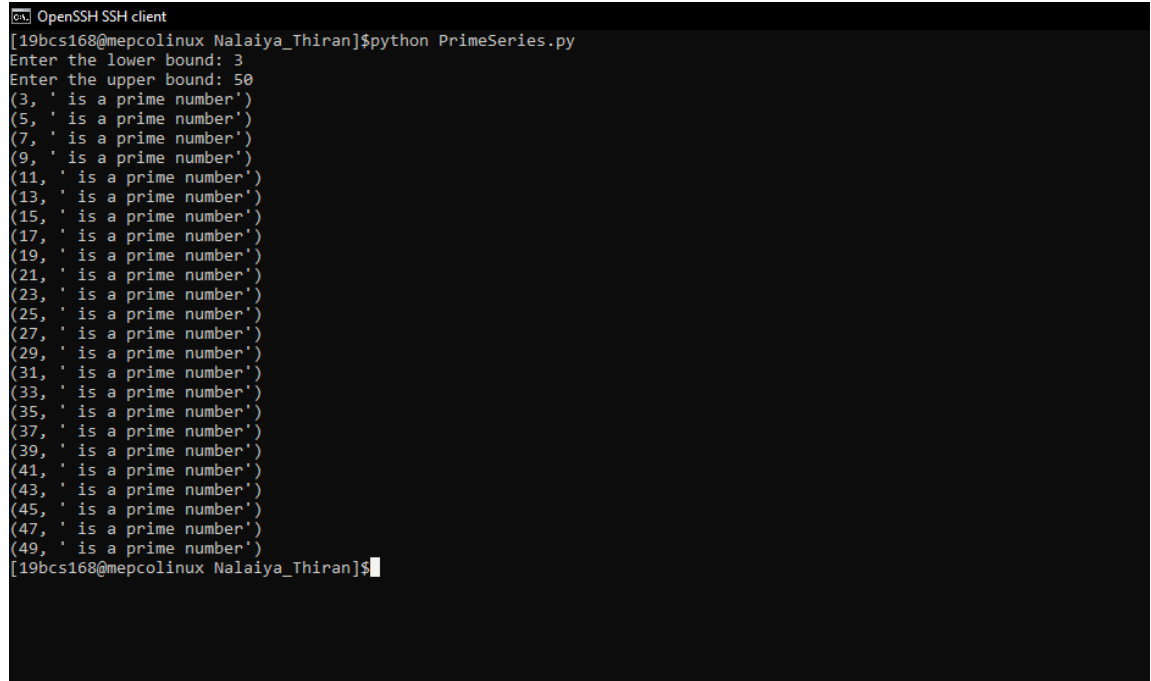


```
OpenSSH SSH client
[19bcs168@mepcolinux Nalaiya_Thiran]$python prime.py
Enter the number to check if it is a prime : 21
(21, ' is not a prime number')
[19bcs168@mepcolinux Nalaiya_Thiran]$python prime.py
Enter the number to check if it is a prime : 19
(19, ' is a prime number')
[19bcs168@mepcolinux Nalaiya_Thiran]$vi prime.py
[19bcs168@mepcolinux Nalaiya_Thiran]$[19bcs168@mepcolinux Nalaiya_Thiran]$vi Odd_inRange.py
[19bcs168@mepcolinux Nalaiya_Thiran]$[19bcs168@mepcolinux Nalaiya_Thiran]$python Odd_inRange.py
Finding odd numbers in a given range....
From : 3
To :50
3 is a odd number
5 is a odd number
7 is a odd number
9 is a odd number
11 is a odd number
13 is a odd number
15 is a odd number
17 is a odd number
19 is a odd number
21 is a odd number
23 is a odd number
25 is a odd number
27 is a odd number
29 is a odd number
31 is a odd number
33 is a odd number
35 is a odd number
37 is a odd number
39 is a odd number
41 is a odd number
43 is a odd number
45 is a odd number
47 is a odd number
49 is a odd number
[19bcs168@mepcolinux Nalaiya_Thiran]$
```

3.Display prime number series upto given number:

```
a = int(input("Enter the lower bound: "))
b = int(input("Enter the upper bound: "))
for i in range(a,b+1):
    if i > 1:
        for j in range(2, i):
            if (i % j) == 0:
                break
            else:
                print(i , " is a prime number")
        else:
            print(i , " is neither prime nor composite")
```

OUTPUT:-

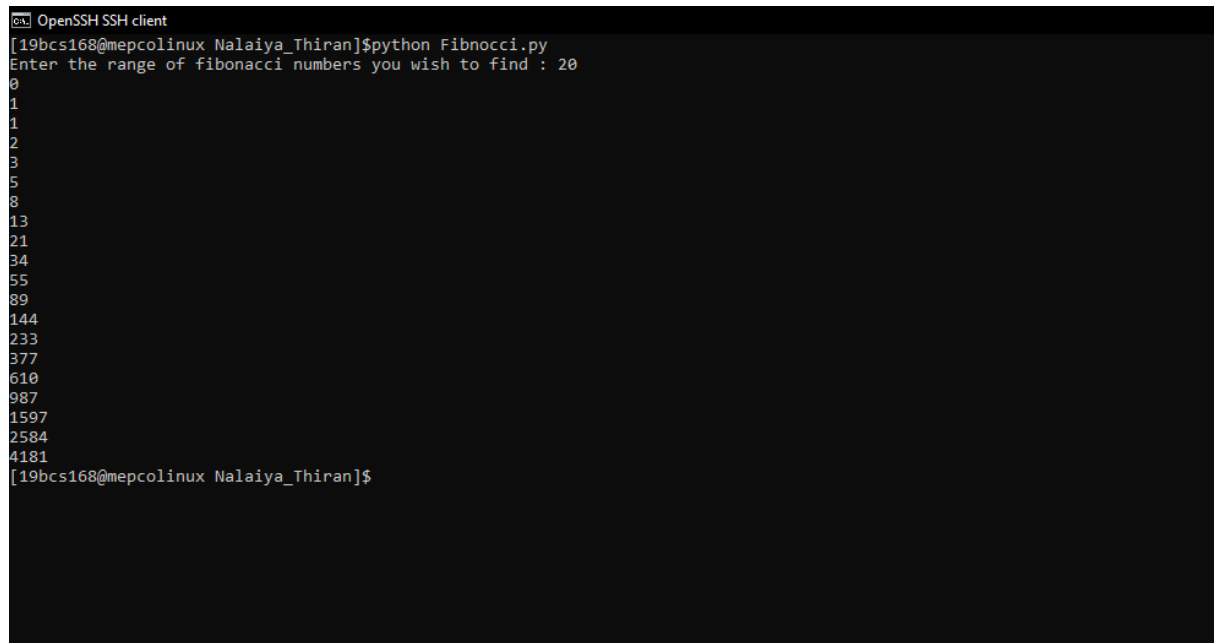


```
OpenSSH SSH client
[19bcs168@mepcolinux Nalaiya_Thiran]$python PrimeSeries.py
Enter the lower bound: 3
Enter the upper bound: 50
(3, ' is a prime number')
(5, ' is a prime number')
(7, ' is a prime number')
(9, ' is a prime number')
(11, ' is a prime number')
(13, ' is a prime number')
(15, ' is a prime number')
(17, ' is a prime number')
(19, ' is a prime number')
(21, ' is a prime number')
(23, ' is a prime number')
(25, ' is a prime number')
(27, ' is a prime number')
(29, ' is a prime number')
(31, ' is a prime number')
(33, ' is a prime number')
(35, ' is a prime number')
(37, ' is a prime number')
(39, ' is a prime number')
(41, ' is a prime number')
(43, ' is a prime number')
(45, ' is a prime number')
(47, ' is a prime number')
(49, ' is a prime number')
[19bcs168@mepcolinux Nalaiya_Thiran]$
```

4. Generate Fibonacci Series:

```
a = 0
b = 1
n = int(input("Enter the range of fibonacci numbers you wish to find : "))
print(a)
print(b)
for i in range(0,n-2):
    fib = a + b
    print(fib)
    a = b
    b = fib
    i = i + 1
```

OUTPUT



```
OpenSSH SSH client
[19bcs168@mepcolinux Nalaiya_Thiran]$python Fibnocci.py
Enter the range of fibonacci numbers you wish to find : 20
0
1
1
2
3
5
8
13
21
34
55
89
144
233
377
610
987
1597
2584
4181
[19bcs168@mepcolinux Nalaiya_Thiran]$
```