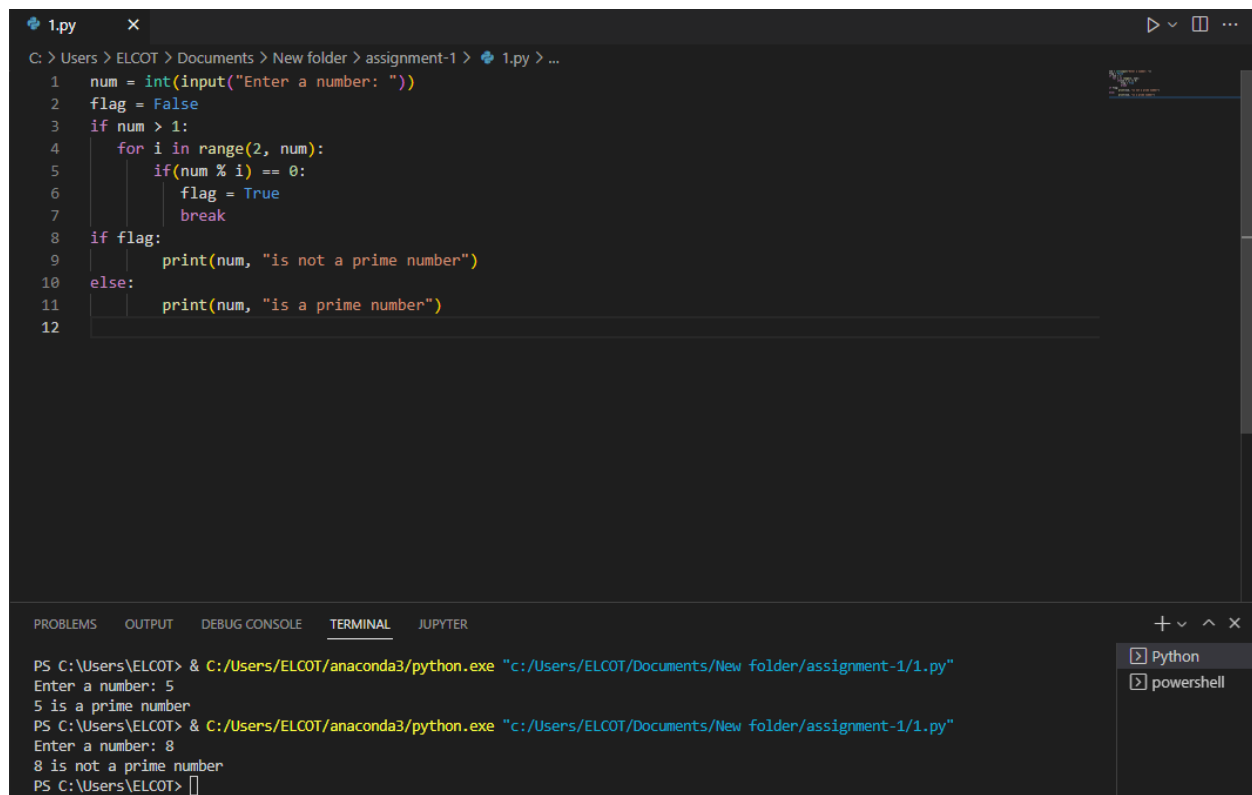


IBM ASSIGNMENT 1

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

Program:

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



```
1.py
C: > Users > ELCOT > Documents > New folder > assignment-1 > 1.py > ...
1  num = int(input("Enter a number: "))
2  flag = False
3  if num > 1:
4      for i in range(2, num):
5          if(num % i) == 0:
6              flag = True
7              break
8  if flag:
9      print(num, "is not a prime number")
10 else:
11     print(num, "is a prime number")
12

PROBLEMS  OUTPUT  DEBUG CONSOLE  TERMINAL  JUPYTER
PS C:\Users\ELCOT> & C:/Users/ELCOT/anaconda3/python.exe "c:/Users/ELCOT/Documents/New folder/assignment-1/1.py"
Enter a number: 5
5 is a prime number
PS C:\Users\ELCOT> & C:/Users/ELCOT/anaconda3/python.exe "c:/Users/ELCOT/Documents/New folder/assignment-1/1.py"
Enter a number: 8
8 is not a prime number
PS C:\Users\ELCOT>
```

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

Program:

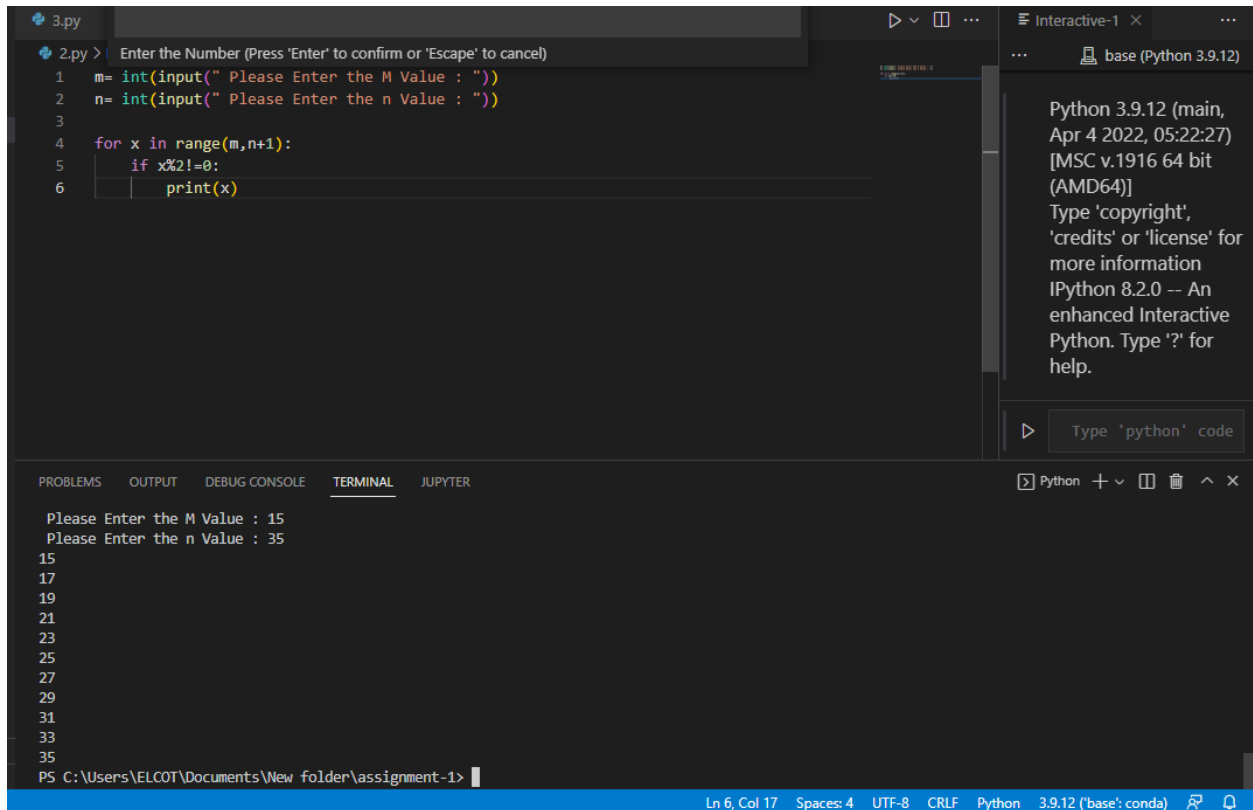
```
m= int(input(" Please Enter the M Value : "))
```

```
n= int(input(" Please Enter the n Value : "))
```

```
for x in range(m,n+1):
```

```
    if x%2!=0:
```

```
        print(x)
```



```
3.py
2.py > Enter the Number (Press 'Enter' to confirm or 'Escape' to cancel)
1 m= int(input(" Please Enter the M Value : "))
2 n= int(input(" Please Enter the n Value : "))
3
4 for x in range(m,n+1):
5     if x%2!=0:
6         print(x)
```

Python 3.9.12 (main, Apr 4 2022, 05:22:27) [MSC v.1916 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 8.2.0 -- An enhanced Interactive Python. Type '?' for help.

Type 'python' code

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** JUPYTER

```
Please Enter the M Value : 15
Please Enter the n Value : 35
15
17
19
21
23
25
27
29
31
33
35
PS C:\Users\ELCOT\Documents\New folder\assignment-1>
```

Ln 6, Col 17 Spaces: 4 UTF-8 CRLF Python 3.9.12 ('base': conda)

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

Program:

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

```
3.py x
3.py > number
1 num = int(input("Enter the Number"))
2 for number in range(1,num+1):
3     if number>1:
4         for i in range(2,number):
5             if (number%i)==0:
6                 break
7         else:
8             print(number)
```

Python 3.9.12 (main, Apr 4 2022, 05:22:27) [MSC v.1916 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 8.2.0 -- An enhanced Interactive Python. Type '?' for help.

Type 'python' code

PROBLEMS OUTPUT DEBUG CONSOLE TERMINAL JUPYTER

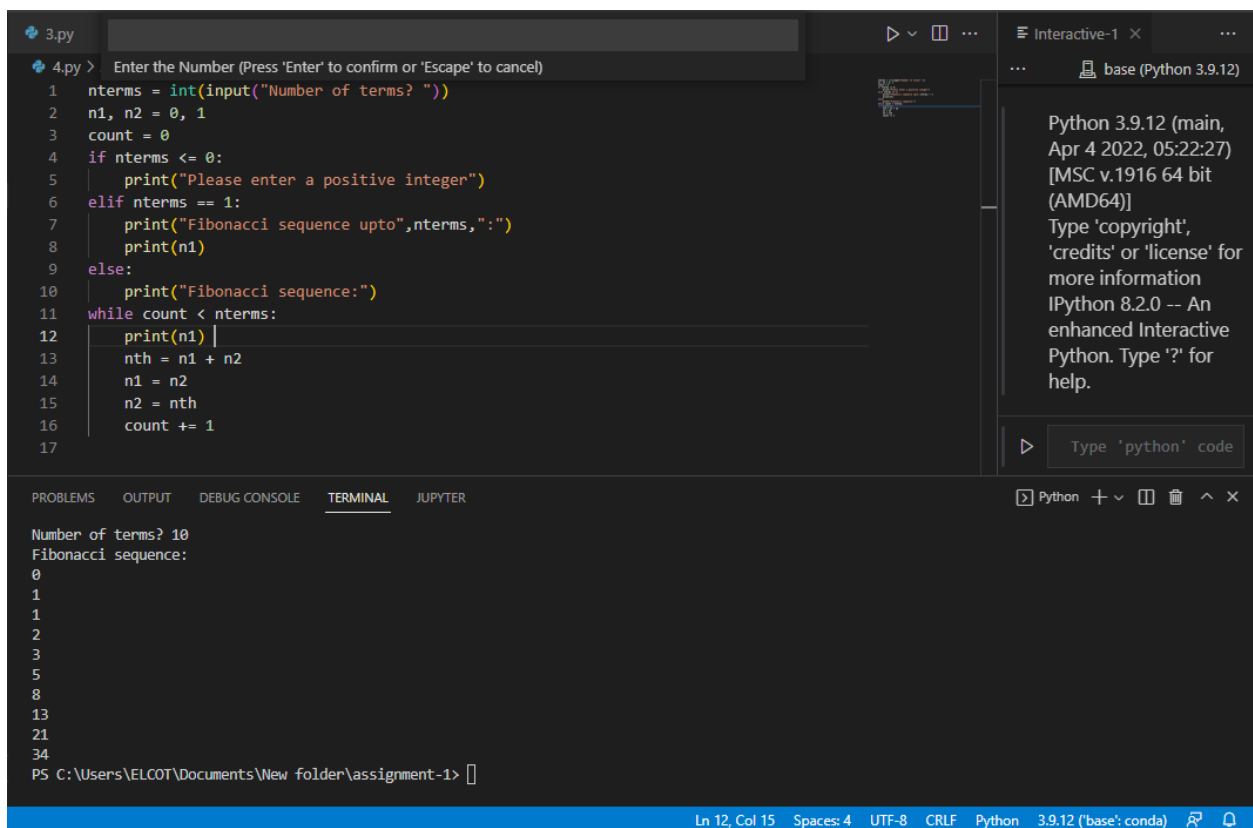
Enter the Number20
2
3
5
7
11
13
17
19
PS C:\Users\ELCOT\Documents\New folder\assignment-1>

Connecting to kernel: base (Python 3.9.12): Waiting for Jupyter Session...

4. Write a python program to generate fibonacci series

Program:

```
nterms = int(input("Number of 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
```



```
3.py
4.py > Enter the Number (Press 'Enter' to confirm or 'Escape' to cancel)
1  nterms = int(input("Number of terms? "))
2  n1, n2 = 0, 1
3  count = 0
4  if nterms <= 0:
5      print("Please enter a positive integer")
6  elif nterms == 1:
7      print("Fibonacci sequence upto",nterms,":")
8      print(n1)
9  else:
10     print("Fibonacci sequence:")
11     while count < nterms:
12         print(n1)
13         nth = n1 + n2
14         n1 = n2
15         n2 = nth
16         count += 1
17
```

Python 3.9.12 (main, Apr 4 2022, 05:22:27) [MSC v.1916 64 bit (AMD64)]
Type 'copyright', 'credits' or 'license' for more information
IPython 8.2.0 -- An enhanced Interactive Python. Type '?' for help.

Type 'python' code

PROBLEMS OUTPUT DEBUG CONSOLE **TERMINAL** JUPYTER

```
Number of terms? 10
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
34
PS C:\Users\ELCOT\Documents\New folder\assignment-1>
```

Ln 12, Col 15 Spaces: 4 UTF-8 CRLF Python 3.9.12 ('base': conda)