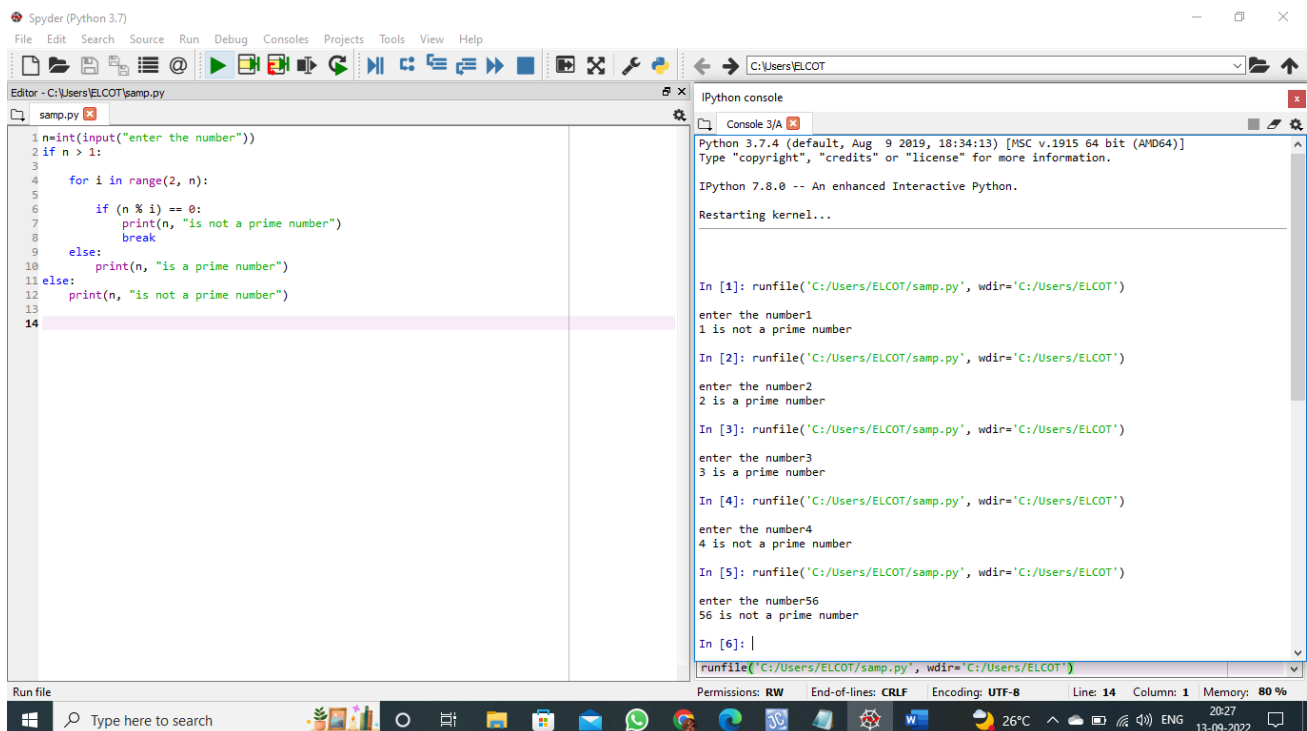


1. Write a python program to test a given number is prime or not

Program:

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



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

Program:

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

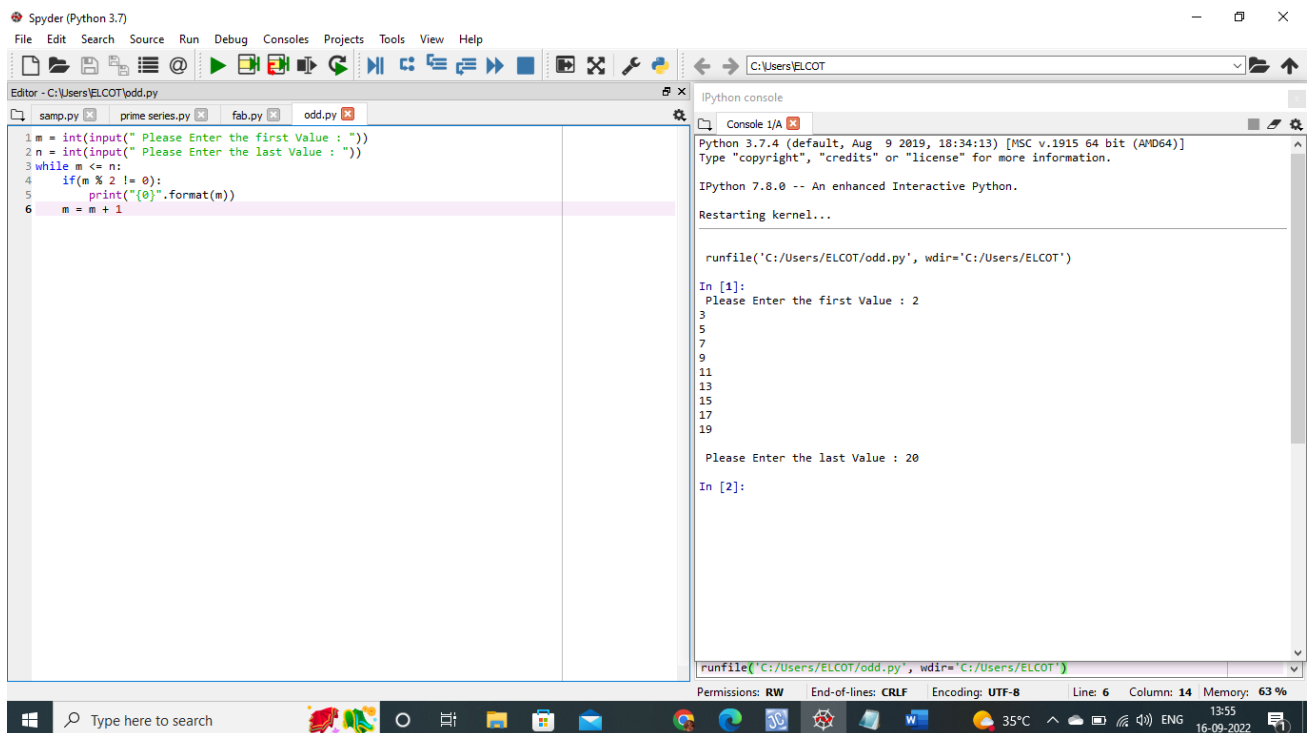
```
n = int(input(" Please Enter the last Value : "))
```

```
while m <= n:
```

```
    if(m % 2 != 0):
```

```
        print("{0}".format(m))
```

```
    m = m + 1
```



The screenshot displays the Spyder Python IDE interface. The editor window on the left shows the Python code for generating odd numbers from m to n. The code is as follows:

```
1 m = int(input(" Please Enter the first Value : "))
2 n = int(input(" Please Enter the last Value : "))
3 while m <= n:
4     if(m % 2 != 0):
5         print("{0}".format(m))
6     m = m + 1
```

The IPython console on the right shows the execution output. It starts with the Python version and IPython version information, followed by the command to run the file. The output shows the program prompting for the first value (2) and the last value (20), and then printing the odd numbers in the range: 3, 5, 7, 9, 11, 13, 15, 17, 19.

```
Python 3.7.4 (default, Aug 9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.
IPython 7.8.0 -- An enhanced Interactive Python.
Restarting kernel...

runfile('C:/Users/ELCOT/odd.py', wdir='C:/Users/ELCOT')

In [1]:
Please Enter the first Value : 2
3
5
7
9
11
13
15
17
19

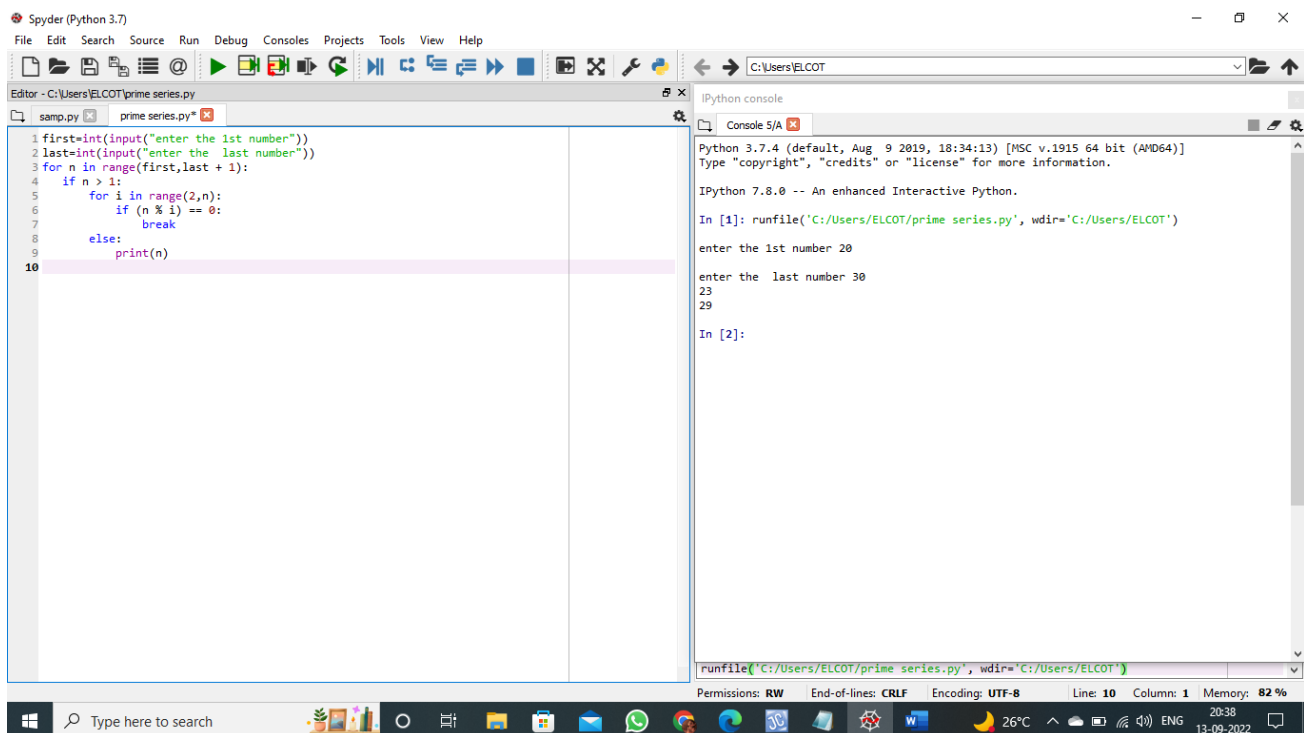
Please Enter the last Value : 20

In [2]:
```

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

Program:

```
first=int(input("enter the 1st number"))
last=int(input("enter the last number"))
for n in range(first,last + 1):
    if n > 1:
        for i in range(2,n):
            if (n % i) == 0:
                break
        else:
            print(n)
```



The screenshot displays the Spyder Python IDE interface. The left pane shows the editor with a Python script named 'prime series.py'. The script prompts the user for the first and last numbers, then iterates through the range from first to last + 1, checking for prime numbers. The right pane shows the IPython console output, which includes the program's execution and the user's input: 'enter the 1st number 20' and 'enter the last number 30'. The console also shows the output of the program, which is the prime numbers 23 and 29. The bottom status bar indicates the file is 'prime series.py', the encoding is UTF-8, and the memory usage is 82%.

```
1 first=int(input("enter the 1st number"))
2 last=int(input("enter the last number"))
3 for n in range(first,last + 1):
4     if n > 1:
5         for i in range(2,n):
6             if (n % i) == 0:
7                 break
8         else:
9             print(n)
10
```

Python 3.7.4 (default, Aug 9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license" for more information.
IPython 7.8.0 -- An enhanced Interactive Python.
In [1]: runfile('C:/Users/ELCOT/prime series.py', wdir='C:/Users/ELCOT')
enter the 1st number 20
enter the last number 30
23
29
In [2]:

runfile('C:/Users/ELCOT/prime series.py', wdir='C:/Users/ELCOT')

Permissions: RW End-of-lines: CRLF Encoding: UTF-8 Line: 10 Column: 1 Memory: 82 %

4. Write a python program to generate fibonacci series

Program:

```
n = int(input("How many times ? "))
a1, a2 = 0, 1
count = 0
if n <= 0:
    print("Please enter a positive integer")
elif n == 1:
    print("Fibonacci sequence upto",n,":")
    print(a1)
else:
    print("Fibonacci sequence:")
    while count < n:
        print(a1)
        a = a1 + a2
        a1 = a2
        a2 = a
        count += 1
```

Spyder (Python 3.7)

File Edit Search Source Run Debug Consoles Projects Tools View Help

Editor - C:\Users\ELCOT\fab.py

```
1 n = int(input("How many times ? "))
2 a1, a2 = 0, 1
3 count = 0
4 if n <= 0:
5     print("Please enter a positive integer")
6 elif n == 1:
7     print("Fibonacci sequence upto",n,":")
8     print(a1)
9 else:
10    print("Fibonacci sequence:")
11    while count < n:
12        print(a1)
13        a = a1 + a2
14        a1 = a2
15        a2 = a
16        count += 1
17
18
```

Python console

Console 5/A

Python 3.7.4 (default, Aug 9 2019, 18:34:13) [MSC v.1915 64 bit (AMD64)]
Type "copyright", "credits" or "license()" for more information.

IPython 7.8.0 -- An enhanced Interactive Python.

Restarting kernel...

In [1]: runfile('C:/Users/ELCOT/fab.py', wdir='C:/Users/ELCOT')

How many times ? 10
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
34

In [2]:

runfile('C:/Users/ELCOT/fab.py', wdir='C:/Users/ELCOT')

Permissions: RW End-of-lines: CRLF Encoding: UTF-8 Line: 18 Column: 1 Memory: 74 %

Type here to search

20:47
13-09-2022