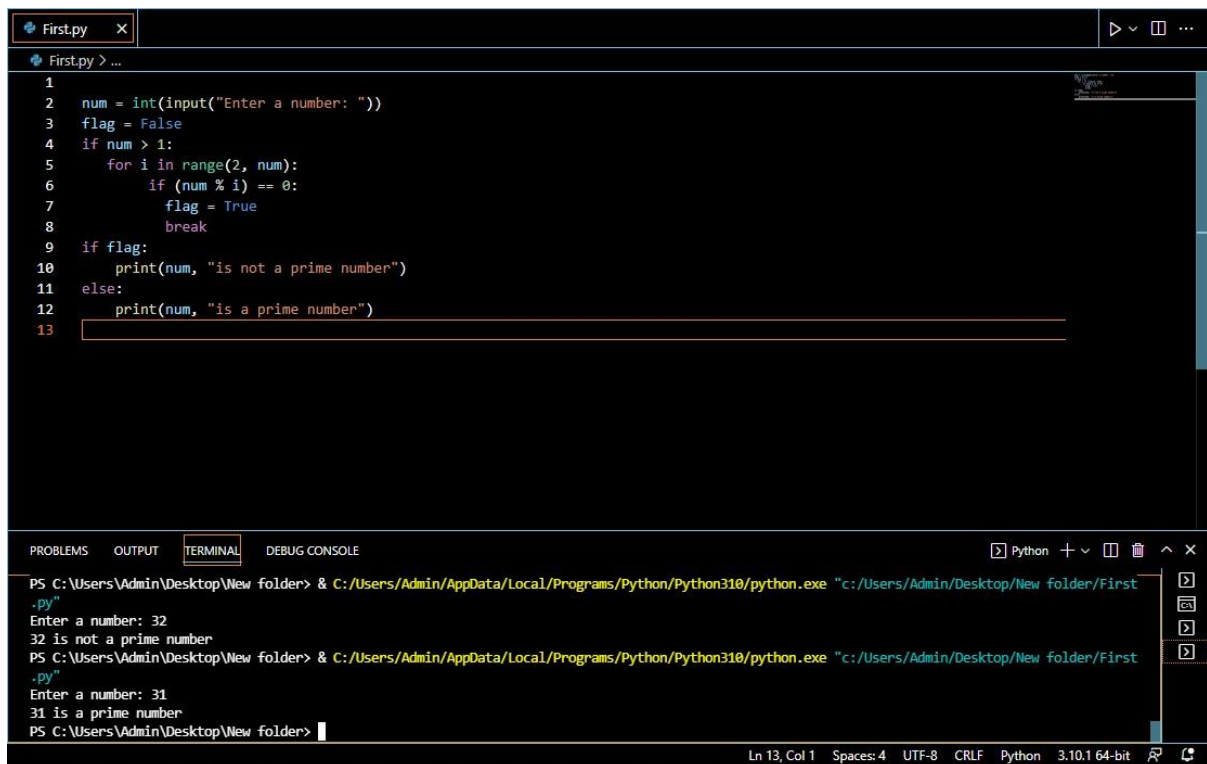


ASSIGNMENT

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

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



The screenshot shows a Python IDE with a file named 'First.py'. The code in the editor is a prime number checker. Below the editor, the 'TERMINAL' tab is active, showing the command to run the script and its output for two test cases: 32 and 31.

```
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
PS C:\Users\Admin\Desktop\New folder> & C:/Users/Admin/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/Admin/Desktop/New folder/First.py"
Enter a number: 32
32 is not a prime number
PS C:\Users\Admin\Desktop\New folder> & C:/Users/Admin/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/Admin/Desktop/New folder/First.py"
Enter a number: 31
31 is a prime number
PS C:\Users\Admin\Desktop\New folder>
```

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

Program: m= int(input(" Please Enter the Maximum Value : "))
number = 1 while number <= maximum:

```
if(number % 2 != 0):  
print("{0}".format(number))    number = number + 1
```



The screenshot shows a Python IDE with a file named 'Second.py'. The code in the editor is as follows:

```
1 m = int(input("Enter the value of m:"))  
2 n = int(input("Enter the value of n:"))  
3  
4 for num in range(m, n + 1):  
5     if num % 2 != 0:  
6         print(num)
```

The IDE's interface includes a 'TERMINAL' tab at the bottom, which is currently empty. The status bar at the bottom right indicates the file is at 'Ln 6, Col 19' with 'Spaces: 4' and is using 'UTF-8' encoding with 'CRLF' line endings. The Python version is '3.10.1 64-bit'.

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 > 1:15
```

```

        for i in range(2,number):
if (number%i)==0:
break      else:
        print(number)

```

```

Third.py
Third.py > ...
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)
9

```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE

```

PS C:\Users\Admin\Desktop\New folder> & C:/Users/Admin/AppData/Local/Programs/Python/Python310/python.exe "c:/Users/Admin/Desktop/New folder/Third.py"
Enter the Number18
2
3
5
7
11
13
17
PS C:\Users\Admin\Desktop\New folder>

```

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,":")`

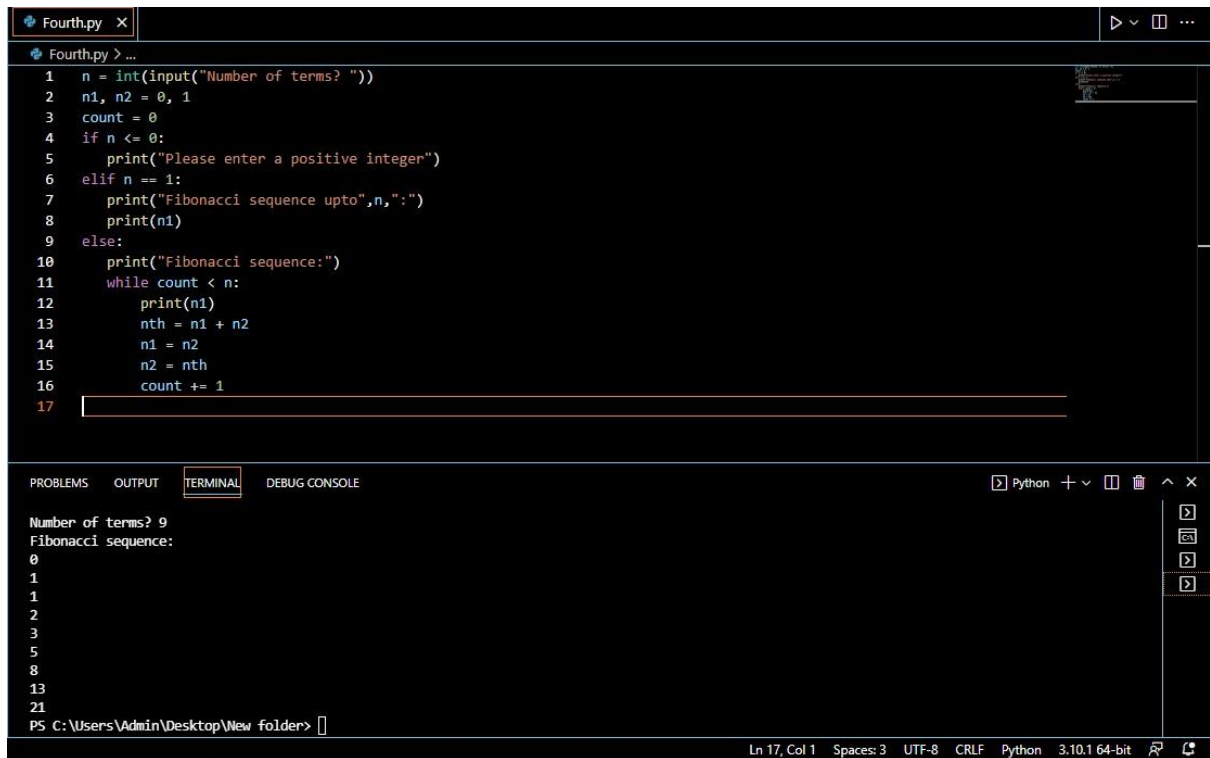
`print(n1)` else:

`print("Fibonacci sequence:")`

while count < nterms:

`print(n1)` `nth = n1 + n2`

```
n1 = n2    n2 = nth
count += 1
```



The screenshot shows a Python IDE with a file named 'Fourth.py'. The code in the editor is a program to generate a Fibonacci sequence. It prompts the user for the number of terms, checks for non-positive input, and then uses a while loop to calculate and print the sequence. The terminal window below shows the program's execution with the input '9' and the resulting Fibonacci sequence: 0, 1, 1, 2, 3, 5, 8, 13, 21. The status bar at the bottom indicates the current line and column (Ln 17, Col 1), the number of spaces (3), the encoding (UTF-8), the line endings (CRLF), and the Python version (3.10.1 64-bit).

```
Fourth.py > ...
1  n = int(input("Number of terms? "))
2  n1, n2 = 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(n1)
9  else:
10     print("Fibonacci sequence:")
11     while count < n:
12         print(n1)
13         nth = n1 + n2
14         n1 = n2
15         n2 = nth
16         count += 1
17
```

PROBLEMS OUTPUT **TERMINAL** DEBUG CONSOLE Python + - [] [X] [X] [X]

Number of terms? 9
Fibonacci sequence:
0
1
1
2
3
5
8
13
21
PS C:\Users\Admin\Desktop\New folder> []

Ln 17, Col 1 Spaces: 3 UTF-8 CRLF Python 3.10.1 64-bit [] []