

Assignment -1
Python Programming

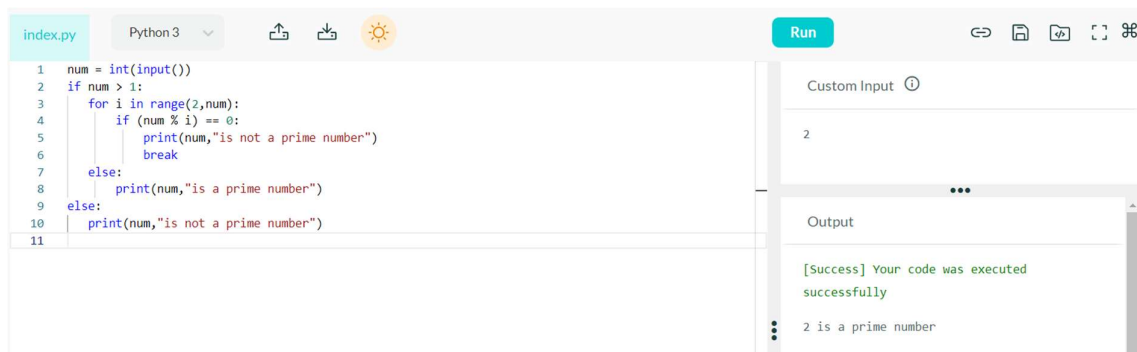
Assignment Date	19 September 2022
Student Name	Ramya S
Student Roll Number	711319CS125
Maximum Marks	2 Marks

Question-1:

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

Solution:

```
num = int(input())
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")
```



The screenshot shows a Python IDE with a file named 'index.py'. The code is as follows:

```
1 num = int(input())
2 if num > 1:
3     for i in range(2,num):
4         if (num % i) == 0:
5             print(num,"is not a prime number")
6             break
7     else:
8         print(num,"is a prime number")
9 else:
10    print(num,"is not a prime number")
11
```

The IDE has a 'Run' button and a 'Custom Input' field. The 'Custom Input' field contains the number '2'. The 'Output' pane shows the following message:

```
[Success] Your code was executed
successfully
2 is a prime number
```

Question-2:

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

Solution:

```
n = int(input())
m = int(input())
while(n<=m):
    if(n%2!=0):
        print(n,end=" ")
    n+=1
n = int(input())
```

```
index.py Python 3 Run
1 n = int(input())
2 m = int(input())
3
4 while(n<=m):
5     if(n%2!=0):
6         print(n,end=" ")
7     n+=1
```

Custom Input ⓘ

10
30

...

Output

[Success] Your code was executed successfully

11 13 15 17 19 21 23 25 27 29

Question-3:

Write a Python program to display prime number series up to given number.

Solution:

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

```
index.py Python 3 Run
1 num = int(input())
2
3 for n in range(2,num + 1):
4     if n > 1:
5         for i in range(2,n):
6             if (n % i) == 0:
7                 break
8         else:
9             print(n,end = " ")
```

Custom Input ⓘ

10

...

Output

[Success] Your code was executed successfully

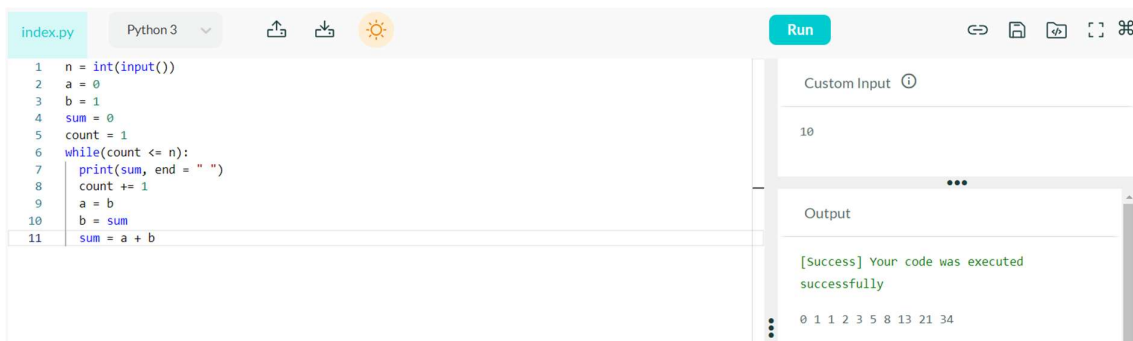
2 3 5 7

Question-4:

Write a Python program to generate Fibonacci series.

Solution:

```
n = int(input())
a = 0
b = 1
sum = 0
count = 1
while(count <= n):
    print(sum, end = " ")
    count += 1
    a = b
    b = sum
    sum = a + b
```



The screenshot shows a Python IDE with a file named 'index.py'. The code in the editor is a Python program to generate the Fibonacci series. The program takes an input 'n' and prints the first 'n' terms of the Fibonacci series. The output of the program is displayed in the 'Output' pane, showing the sequence: 0 1 1 2 3 5 8 13 21 34. The 'Custom Input' field contains the value '10'. The 'Run' button is visible in the top right corner of the IDE.

```
1 n = int(input())
2 a = 0
3 b = 1
4 sum = 0
5 count = 1
6 while(count <= n):
7     print(sum, end = " ")
8     count += 1
9     a = b
10    b = sum
11    sum = a + b
```

Custom Input ①

10

...

Output

[Success] Your code was executed successfully

0 1 1 2 3 5 8 13 21 34