

Assignment -1
Python Programming

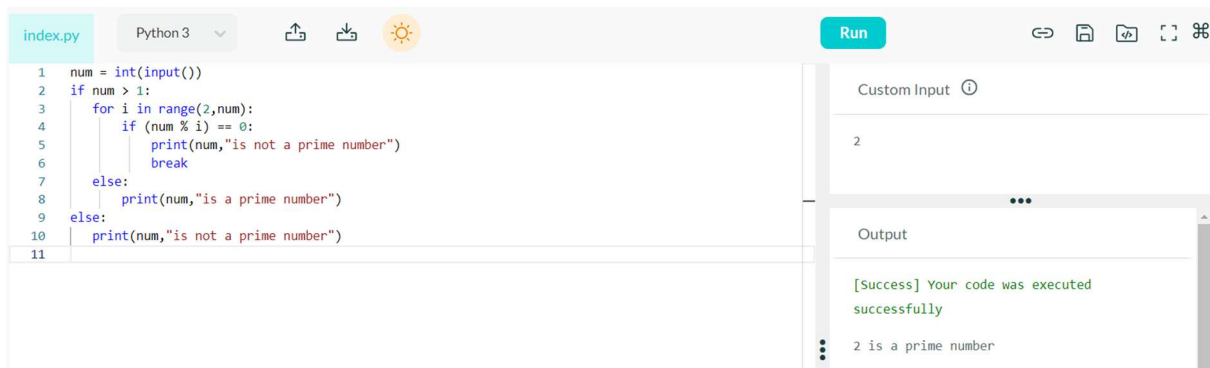
Assignment Date	19 September 2022
Student Name	Vaishnavi S
Student Roll Number	711319CS172
Maximum Marks	2 Marks

Question-1:

Write a python program to test if 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 interface. On the left, a code editor displays the prime number program code. 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
```

On the right side of the IDE, there is a 'Run' button and a 'Custom Input' field containing the number '2'. Below the input field, the 'Output' section shows the execution result: '[Success] Your code was executed successfully' followed by '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

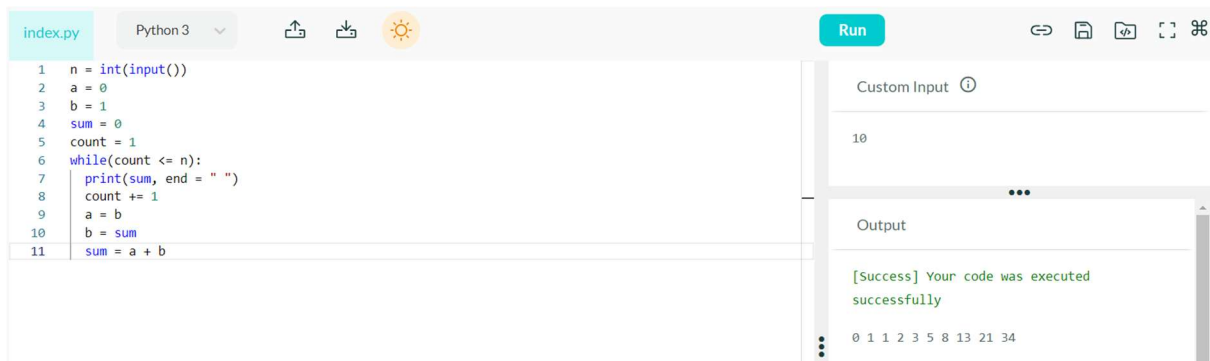
2 3 5 7

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 interface. On the left, a code editor displays the following Python code in a file named `index.py`:

```
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
```

On the right side of the IDE, there is a 'Run' button and a 'Custom Input' field containing the value '10'. Below the input field, the 'Output' section shows the result of the program execution:

```
[Success] Your code was executed
successfully
0 1 1 2 3 5 8 13 21 34
```