

## 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")
```



The screenshot shows a code editor window titled 'First.py' with the following Python code:

```
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
```

Below the code editor is a terminal window titled 'TERMINAL' showing the execution of the program:

```
Windows PowerShell
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Try the new cross-platform PowerShell https://aka.ms/pscore6

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: 5
5 is a prime number
PS C:\Users\Admin\Desktop\New folder>
```

The terminal output confirms that the number 5 is a prime number.

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

Program:

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

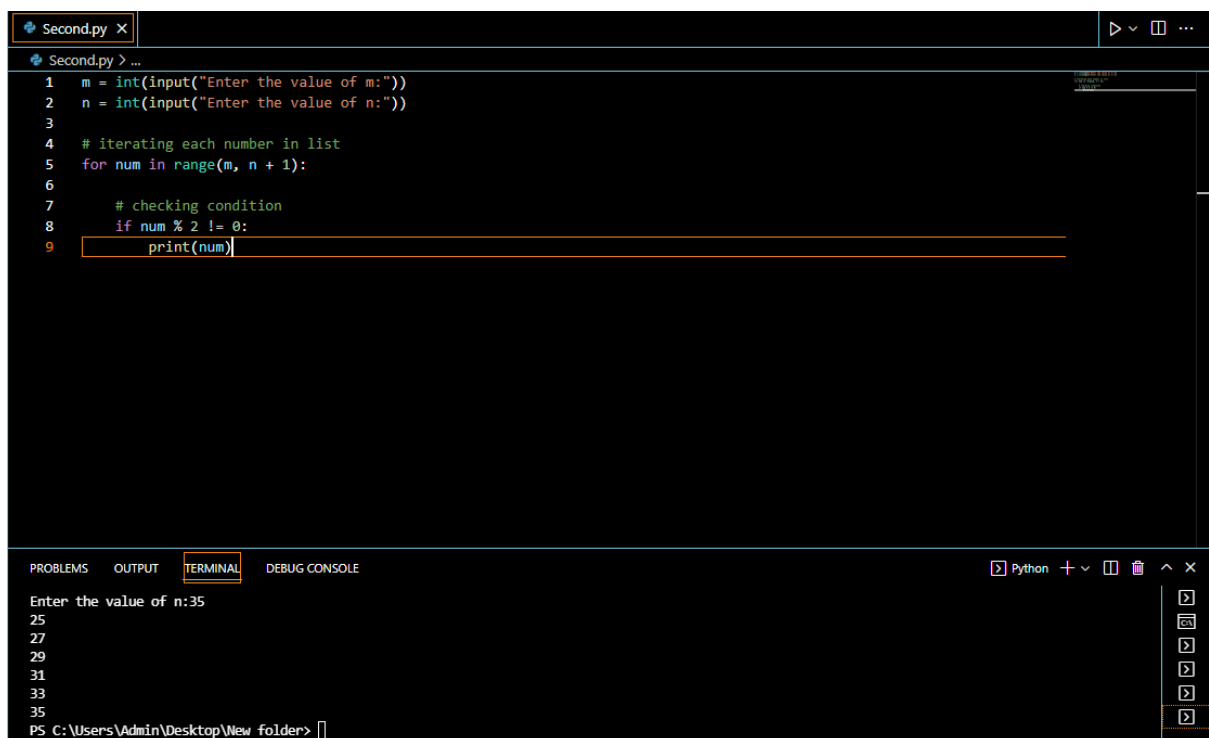
```
number = 1
```

```
while number <= maximum:
```

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

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

```
    number = number + 1
```



```
1 m = int(input("Enter the value of m:"))
2 n = int(input("Enter the value of n:"))
3
4 # iterating each number in list
5 for num in range(m, n + 1):
6
7     # checking condition
8     if num % 2 != 0:
9         print(num)
```

Enter the value of n:35

25  
27  
29  
31  
33  
35

PS C:\Users\Admin\Desktop\New folder>

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)
```



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

```
1 num = int(input("Enter the Number"))
2 for number in range(1,num+1):
3     if number>1:15
4
5     for i in range(2,number):
6         if (number%i)==0:
7             break
8         else:
9             print(number)
10
```

The bottom panel shows the 'TERMINAL' output:

```
older/Second.py"
Enter the Number15
2
3
5
7
11
13
PS C:\Users\Admin\Desktop\New folder>
```

On the right side of the terminal panel, there are icons for 'powershell', 'cmd', and 'Python'.

