

Assignment -1
Python Programming

Assignment Date	19 September 2022
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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 dark background. The top pane displays the code for checking if a number is prime. The bottom pane shows the output of the program, which is '5 is a prime number'. Below the output, it says '...Program finished with exit code 0' and 'Press ENTER to exit console.'

```
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
10
```

5 is a prime number

...Program finished with exit code 0
Press ENTER to exit console.

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
```

```
1 n = int(input())
2 m = int(input())
3
4
5 while(n==m):
6     if(m%2!=0):
7         print(n,end=" ")
8         n+=1
9
10
```

input

```
10
30
11 13 15 17 19 21 23 25 27 29
...Program finished with exit code 0
Press ENTER to exit console.
```

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 = " ")
```

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

input

```
10
2 3 5 7
...Program finished with exit code 0
Press ENTER to exit console.
```

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 dark theme. The editor window displays the following code:

```
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
12
```

Below the editor is a console window titled "input". It shows the output of the program for n=10:

```
10
0 1 1 2 3 5 8 13 21 34
...Program finished with exit code 0
Press ENTER to exit console
```