Assignment-2

1)Write a python program to test a number is pime or not.

```python
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")
```

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

```python
start = int(input("Enter the start of range:"))

end = int(input("Enter the end of range:"))

while start <= end:

    cnt=0

    i=2

    while i<=start-1:

        if (start% i) == 0:

            cnt=cnt+1

        i=i+1

    if cnt==0:

        print(start)

    start=start+1
```

3)Write a python program to display prime number series up to given number.

```python
end = int(input("Enter the end of range:"))

start=1

while start <= end:

    cnt=0

    i=2
```

```python
    while i<=start-1:

        if (start% i) == 0:

            cnt=cnt+1

        i=i+1

    if cnt==0:

        print(start)

    start=start+1
```

4)Write a python program to generate Fibonacci series.

```python
nterms = int(input("How many terms? "))

# first two 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
```