**Assignment-2**

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

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.***

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.***

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

start=1

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

4)***Write a python program to generate Fibonacci series.***

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