**1.**Python Program for Legendre\’s Conjecture.****

import math

def isprime( n ):

i = 2

for i in range (2, int((math.sqrt(n)+1))):

if n%i == 0:

return False

return True

def LegendreConjecture( n ):

print ( "Primes in the range ", n\*n

, " and ", (n+1)\*(n+1)

, " are:" )

for i in range (n\*n, (((n+1)\*(n+1))+1)):

if(isprime(i)):

print (i)

n = 50

LegendreConjecture(n)

**OUTPUT**

