IMPLEMENTING CLASS

import math

class Fibonacci:

def \_\_init\_\_(self):

self.i = 0

self.x = 0

self.y = 1

self.F = [self.x, self.y]

def next(self):

self.i += 1

return self.F[self.i-1] # return next # from list F

def calculate(self, n):

# use previously computed fibonachi numbers stored in list F

l = len(self.F)

x = self.F[l-2]

y = self.F[l-1]

newn = n-l

# calculate new numbers if it does not exist in list

for i in range(newn+1):

x, y = y, x + y

self.F.append(y)

return self.F[n] # return nth # in Fibonacci series

def writeToFile(self, n, filename):

filehandle = open(filename, 'a')

self.calculate(n)

for j in range(n):

filehandle.write(str(self.F[j])+'\n')

filehandle.close()

print("the series is")

a, b = 0, 1

for i in range(0, 10):

print(a)

a,b = b, a + b

class febonaccinumber:

def perfectSquare(x):

s = int(math.sqrt(x))

return s \* s == x

n = int(input("enter the number"))

result1 = 5 \* n \* n + 4

result2 = 5 \* n \* n - 4

if perfectSquare(result1) or perfectSquare(result2):

print(n, "is a febonacci number")

else:

print(n, "is not a febenocci number")

PEP8 SCREEN SHOT

