Questions 7

import math

C= 50

H = 30

Ds = []

result =[]

Dv=input("enter the value of D\n")

Ds=Dv.split(",")

Ds = [int(i) for i in Ds]

i=0

l = len(Ds)

while(i<l):

    Q = round(math.sqrt((2\*C\*Ds[i])/H))

    result. append(Q)

    i+=1

print("output=",result)

Question 6

import numpy as np

array1 = np.array([0, 1, 1])

array2 = np.array([2, 2, 1])

# Original array1

print(array1)

# Original array2

print(array2)

# Covariance matrix

print("\nCovariance matrix of the said arrays:\n",

      np.cov(array1, array2))

Question 5

import numpy as np

x= np.arange(6).reshape(3, 2)

print("Original array elements:")

print(x)

print("Array to list:")

print(x.tolist())

Question 2

def factorial(n):

    if n == 0:

        return 1

    return n \* factorial(n-1)

# Driver Code

num = 5;

print("Factorial of", num, "is",

factorial(num))

Question 1

number=[]

for x in range(2000, 3201):

    if (x%7==0) and (x%5>0):

        number.append(str(x))

print (','.join(number))

Question 3

number = int(input("Type a number: "))

numberDict = {}

for i in range(1, number+1):

    numberDict[i] = i\*i

print(numberDict)

Question 4

def missing\_char(str, n):

      front = str[:n]

  back = str[n+1:]

  return front + back