**#Addition\_and\_subtraction\_of\_two\_matrix**

r = int(input("Enter the rows: "))

c = int(input("Enter the columns: "))

print("Enter Matrix 1:")

m1 = [[int(input()) for i in range(c)] for i in range(r)]

print("Matrix 1 is: ")

for n in m1:

print(n)

print("Enter Matrix 2:")

m2 = [[int(input()) for i in range(c)] for i in range(r)]

for n in m2:

print(n)

r = [[0 for i in range(c)] for i in range(r)]

print("1)addition ")

print("2)subtraction ")

choice=int(input("Enter your choice : "))

if choice==1:

for i in range(len(r)):

for j in range(c):

r[i][j] = [m1[i][j] + m2[i][j]]

elif choice==2:

for i in range(len(r)):

for j in range(c):

r[i][j] = [m1[i][j] - m2[i][j]]

else:

print("Please enter the valid choice ")

if choice==1 or choice==2:

print("Resultant Matrix:")

for i in r:

print(i)

**#Multiplication\_of\_two\_matrix**

rows\_a=int(input("Enter the Numbers of rows:"))

column\_a=int(input("Enter the Numbers of columns:"))

print("Enter the elements of first Matrix:")

matrix\_a=[[int(input()) for i in range(column\_a)]

for i in range(rows\_a)]

print("First Matrix is:")

for n in matrix\_a:

print(n)

column\_b=int(input("Enter the Numbers of columns for the second matrix:"))

print("Enter the elements of Second Matrix:")

matrix\_b=[[int(input())for i in range(column\_b)]

for i in range(column\_a)]

print("Second Matrix is:")

for n in matrix\_b:

print(n)

result=[[0 for i in range(column\_b)]

for i in range(rows\_a)]

for i in range(len(matrix\_a)):

for j in range(len(matrix\_b[0])):

for k in range(len(matrix\_b)):

result[i][j]+=matrix\_a[i][k]\*matrix\_b[k][j]

print("Matrix\_a X Matrix\_b is:")

for r in result:

print(r)

**#QUADRATIC\_EQUATION**

import math

def findRoots(a, b, c):

dis\_form = b \* b - 4 \* a \* c

sqrt\_val = math.sqrt(abs(dis\_form))

if dis\_form > 0:

print(" real and different roots ")

print((-b + sqrt\_val) / (2 \* a))

print((-b - sqrt\_val) / (2 \* a))

elif dis\_form == 0:

print(" real and same roots")

print(-b / (2 \* a))

else:

print("Complex Roots")

print(- b / (2 \* a), " + i", sqrt\_val)

print(- b / (2 \* a), " - i", sqrt\_val)

a = int(input('Enter a:'))

b = int(input('Enter b:'))

c = int(input('Enter c:'))

if a == 0:

print("Input correct quadratic equation")

else:

findRoots(a, b, c)