**PROGRAM CODE:**

#add two matrices

X=[[1,2,3],[4,5,6],[7,8,9]]

Y=[[9,8,7],[6,5,4],[3,2,1]]

R=[X[i][j]+Y[i][j] for i in range(len(X)) for j in range(len(X[0]))]

print('The two matrices are ', X,Y)

print('The resultant matrix is ',R)

**OUTPUT:**

First matrix is [[1, 2, 3], [4, 5, 6], [7, 8, 9]]

Second matrix is [[9, 8, 7], [6, 5, 4], [3, 2, 1]]

The resultant matrix is [10, 10, 10, 10, 10, 10, 10, 10, 10]

**PROGRAM CODE:**

#To multiply two matrices

X=[[1,2,3],[4,5,6],[7,8,9]]

Y=[[9,8,7],[6,5,4],[3,2,1]]

M=[[sum(X[i][k]\*Y[k][j] for k in range(len(Y)))

for j in range(len(Y[0]))] for i in range(len(X))]

print('The two matrices are ', X,Y)

print('The resultant matrix is ',M)

**OUTPUT:**

First matrix is [[1, 2, 3], [4, 5, 6], [7, 8, 9]]

Second matrix is [[9, 8, 7], [6, 5, 4], [3, 2, 1]]

The resultant matrix is [[30, 24, 18], [84, 69, 54], [138, 114, 90]]