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Input the first matrix

How many rows in the matrix? 3

How many columns in the matrix? 2

Enter element 1 in row 1: 1

Enter element 2 in row 1: 2

Enter element 1 in row 2: 3

Enter element 2 in row 2: 4

Enter element 1 in row 3: 5

Enter element 2 in row 3: 6

A = [[1, 2], [3, 4], [5, 6]]

Input the second matrix

How many rows in the matrix? 2

How many columns in the matrix? 3

Enter element 1 in row 1: 1

Enter element 2 in row 1: 2

Enter element 3 in row 1: 3

Enter element 1 in row 2: 4

Enter element 2 in row 2: 5

Enter element 3 in row 2: 6

B = [[1, 2, 3], [4, 5, 6]]

C = [[9, 12, 15], [19, 26, 33], [29, 40, 51]]

CODE:

```
def main():
    print("Input the first matrix")
    matrix1 = readMatrix()
    print("A =", matrix1)

    print("-----")

    print("Input the second matrix")
    matrix2 = readMatrix()
    while(len(matrix1[0])!=len(matrix2)):
        print("\n" + "The number of columns of the first matrix must have the same number
of rows of the second matrix")
        print("Enter 2 matrices again!")
        print("Input the second matrix")
        matrix2 = readMatrix()
    print("B =", matrix2)

    print()
    print("C =", multiplyMatrices(matrix1, matrix2))

def readMatrix():
    r = int(input("How many rows in the matrix? "))
    c = int(input("How many columns in the matrix? "))

    X = [[0 for j in range (c)] for i in range(r)]
    for i in range(r):
        for j in range(c):
            X[i][j] = int(input("Enter element " + str(j+1) + " in row " + str(i+1) + ": "))

    return X

def multiplyMatrices(matrix1, matrix2):
    X = [[0 for j in range (len(matrix1))] for i in range(len(matrix2[0]))]
    for i in range(len(X)):
        for j in range(len(X[0])):
            X[i][j] = sum(matrix1[i][k]*matrix2[k][j] for k in range(len(matrix1[0])))

    return X

main()
```