In [4]:

```
R1 = int(input('Enter number of rows for matrix A: '))
C1 = int(input('Enter number of columns for matrix A: '))

print()

R2 = int(input('Enter number of rows for matrix B: '))
C2  = int(input('Enter number of columns for matrix B: '))

print()

if C1 == R2:
    print('Enter values for matrix A')
    matrixA = [[int(input(f"Column {j+1} -> Enter {i+1} element:")) for j in range(C1)]
for i in range(R2) ]

    print()

    print('Enter values for matrix B ')
    matrixB = [[int(input(f"Column {j+1} -> Enter {i+1} element:")) for j in range(C2)]
for i in range(R2) ]

    print()

    print('Matrix A :')
    for i in matrixA:
        print(i)

    print()

    print('Matrix B :')
    for i in matrixB:
        print(i)

    result = [[0 for j in range(C2)] for i in range(R1)]

    for i in range(len(matrixA)):
        for j in range(len(matrixB[0])):
            for k in range(len(matrixB)):
                result[i][j] += matrixA[i][k] * matrixB[k][j]

    print()

    print('Multiplication of Matrix A and Matrix B is :')
    for i in result:
        print(i)

else:
    print('Multiplication of matrices is not possible')
```

```
Enter values for matrix A

Enter values for matrix B

Matrix A :
[2, 2, 2]
[2, 2, 2]
[2, 2, 2]

Matrix B :
[1, 1, 1]
[1, 1, 1]
[1, 1, 1]

Multiplication of Matrix A and Matrix B is :
[6, 6, 6]
[6, 6, 6]
[6, 6, 6]
```