// Java program to multiply two square matrices.

import java.io.\*;

class GFG {

// Function to print Matrix

static void printMatrix(int M[][],int rowSize,int colSize)

{

for (int i = 0; i < rowSize; i++) {

for (int j = 0; j < colSize; j++)

System.out.print(M[i][j] + " ");

System.out.println();

}

}

// Function to multiply

// two matrices A[][] and B[][]

static void multiplyMatrix(

int row1, int col1, int A[][],

int row2, int col2, int B[][])

{

int i, j, k;

// Print the matrices A and B

System.out.println("\nMatrix A:");

printMatrix(A, row1, col1);

System.out.println("\nMatrix B:");

printMatrix(B, row2, col2);

// Check if multiplication is Possible

if (row2 != col1) {

System.out.println(

"\nMultiplication Not Possible");

return;

}

// Matrix to store the result

// The product matrix will

// be of size row1 x col2

int C[][] = new int[row1][col2];

// Multiply the two matrices

for (i = 0; i < row1; i++) {

for (j = 0; j < col2; j++) {

for (k = 0; k < row2; k++)

C[i][j] += A[i][k] \* B[k][j];

}

}

// Print the result

System.out.println("\nResultant Matrix:");

printMatrix(C, row1, col2);

}

// Driver code

public static void main(String[] args)

{

int row1 = 4, col1 = 3, row2 = 3, col2 = 4;

int A[][] = { { 1, 1, 1 },

{ 2, 2, 2 },

{ 3, 3, 3 },

{ 4, 4, 4 } };

int B[][] = { { 1, 1, 1, 1 },

{ 2, 2, 2, 2 },

{ 3, 3, 3, 3 } };

multiplyMatrix(row1, col1, A,

row2, col2, B);

}

}