// Online Java Compiler

// Use this editor to write, compile and run your Java code online

import java.util.Scanner;

public class Main {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

// Prompt user for the number of rows and columns

System.out.print("Mag enter ka ng Number sa rows: ");

int rows = scanner.nextInt();

System.out.print("Mag enter ka ng Number sa columns: ");

int columns = scanner.nextInt();

// Create a 2D array with the specified dimensions

int[][] array = new int[rows][columns];

// Populate the array using nested for loops

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

for (int j = 0; j < columns; j++) {

array[i][j] = i \* j; // Set the element to the product of its row and column indices

}

}

// Print the 2D array in a table format

System.out.println("\nGenerated 2D Array (Product of indices):");

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

for (int j = 0; j < columns; j++) {

System.out.print(array[i][j] + "\t"); // Print each element, separated by tabs for alignment

}

System.out.println(); // Move to the next line after each row

}

// Close the scanner

scanner.close();

}

}