

// 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();  
}  
}
```