import java.util.Scanner;

public class ArrayAddressCalculations {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.print("Enter the number of rows: ");

int rows = scanner.nextInt();

System.out.print("Enter the number of columns: ");

int columns = scanner.nextInt();

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

int baseAddress = array[0][0];

int sizeOfElement = 4; // 4 bytes for int type

System.out.println("The total number of elements in the array is: " + rows \* columns);

System.out.print("Enter the row index: ");

int rowIndex = scanner.nextInt();

System.out.print("Enter the column index: ");

int columnIndex = scanner.nextInt();

int address = baseAddress + (rowIndex \* columns + columnIndex) \* sizeOfElement;

System.out.println("The address of the element is: " + address);

}

}