

```

/*
 * A program which displays a diamond pattern, whose breadth is (2n -1),
 * where (n) is chosen by the user.
 *
 * Example :
 * (n = 3)
 *
 *      *
 *     ***
 *    *****
 *   ***
 *  *
 */

import java.util.Scanner;

class Diamond {
    public static void main (String[] args) {
        System.out.print("Enter a number : ");
        int number = (new Scanner(System.in)).nextInt();
        for (int i = 1 - number; i < number; i++) {
            for (int j = Math.abs(i); j >= 0; j--)
                System.out.print(" ");
            for (int j = (2 * (number - Math.abs(i))) - 1; j > 0; j--)
                System.out.print("*");
            System.out.print("\n");
        }
    }
}

/*
 * Variable Description :
 * -----
 * Serial no. | Variable name | Data type | Purpose
 * ~~~~~
 * 1 | number | int | Stores the number
 * | | | | entered
 * -----
 * 2 | i | int | Counter variable (line
 * | | | | number)
 * -----
 * 3 | j | int | Counter variable
 * ~~~~~
 */

```