CS101: Lab #8
Conditionals and *Loops* III

1. Write a Java program that reads an integer n from the keyboard and loops until $-13 \leq n \leq 13$ is successfully entered. A do-while loop is advised.

2. Write a Java program that reads an integer n from the keyboard and prints the corresponding value $n!$. You must verify that the input integer satisfies the constraint $0 \leq n \leq 13$; keep looping until the constraint is satisfied.

3. Write a Java program to print the pattern consistent with the progression:

```
x xx xxx xxxx xxxxx
```

   The program should prompt the user for the desired length of the pattern; the input integer indicates the last block of asterisks. For simplicity, interpret a negative value positively; that is, use absolute value.

4. Write a Java program that generates an isosceles triangle made of asterisks. The program should prompt the user to specify the size of the triangle. In this exercise, we will measure length using asterisks. For example,

```
Enter the size of the equal sides in an isosceles triangle: 6

*
**
* *
*  *
*   *
******
```