PROGRAMMING PROJECT 7- RECURSION

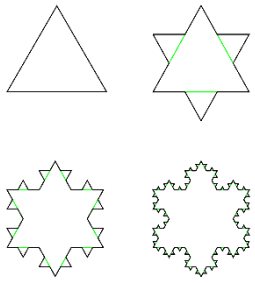
CS 143

Definition: Recursion: See definition of Recursion

This week you will turn in **two** programs

1) The Koch snowflake can be constructed by starting with an equilateral triangle, then recursively altering each line segment as follows:

1. Divide the line segment into three segments of equal length.
2. Draw an equilateral triangle that has the middle segment from step 1 as its base and points outward.
3. Remove the line segment that is the base of the triangle from step 2.



Write a program to draw the Koch snowflake on a `DrawingPanal` recursively

2) Write a **recursive backtracking program** that solves the **8 Queens Puzzle** discussed in class and on pages 784-791 in the text book.

- Your program must work on any size board 4x4 or greater (ask the user for the size they wish to solve
- You may present your solution either using the console or on a `DrawingPanel`.