Lab Session 17: Nested Loops

**Reminder: If you have not done previous labs, you should start with those!**

Theory:

1. Write an algorithm that asks the user to enter 1 number. The program should then print a triangle of numbers with a height based on the number they typed. For example, if they type the number 5, the program should print:  
     
   \*  
   \*\*  
   \*\*\*  
   \*\*\*\*  
   \*\*\*\*\*
2. Same question except make the program print the triangle upside down. For example, if the user enters 5, the program should print  
   \*\*\*\*\*  
   \*\*\*\*  
   \*\*\*  
   \*\*  
   \*
3. Write an algorithm in which you ask the user to enter \*two\* numbers *size* and *count*. The program should print *count* upside down triangles of size *size.*  
   For example, if the user enters *size* of 3 and *count* of 4, the output should be  
     
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   Hint: To do this all in one method will require three nested loops! To avoid this, write a helper method *printTriangle()* so that you can refer to these via a single command from now on!

Application:

1. Implement the above programs in Java. You should have 3 separate programs