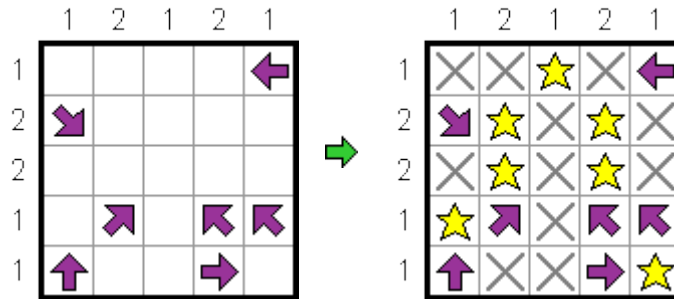


CS2402
Spring 2009
Lab 2
Stacks and Backtracking
 Due Tuesday, February 10, 2009

Your assignment consists of writing a program that uses backtracking and a stack to find a solution to the following type of puzzle, called Shinro or Starlit Sky:



We can see the problem statement on the left and the solution on the right. Solving the problem consists of finding which of the squares contain stars and which don't. The numbers at the top indicate the number of stars that each column contains, similarly, the numbers to the left indicate the how many stars the corresponding row contains. Each arrow points to exactly one star and each star has exactly one arrow pointing to it.

The example above shows a 5-by-5 board as an example, but your program must work for square boards of any size. To test your program, you can find examples of this type of problem at www.janko.at/Raetsel/Sternenhimmel/index.htm