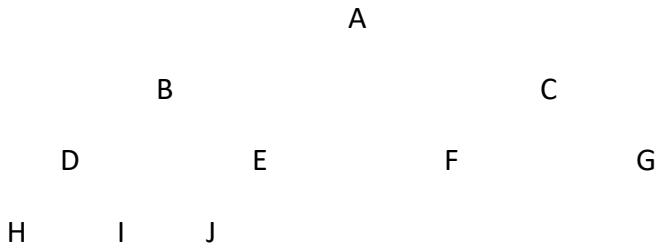
1. Download the min234.java code. Write a method that returns the minimum value in a 2-3-4 tree.

2. Download the topdown.java code. Add the code so it makes a tree from characters typed by the user. Make a complete binary tree, one that is completely full except possibly on the right end of the bottom row. The characters should be ordered from the top down and from left to right along each row, as if writing a letter on a pyramid. The string ABCDEFGHIJ would be arranged as:



One way to create this tree is from the top down. Start by creating a node which will be the root of the final tree. If you think of the nodes as being numbered in the same order the letter are arranged, with 1 at the root, then any node numbered n has a left child numbered 2*n and a right child numbered 2*n+1. You might use a recursive routine that makes two children and then calls itself for each child.