Assignment 13

1. Consider the multi-way search tree of Slide 5 in the Lecture 13 notes, is it a (2,4) tree? Justify your answer.

2. Consider the following sequence of keys:
   (5, 16, 22, 45, 2, 10, 18, 30, 50, 12, 1, 25, 7)
   Insert items with this set of keys, in the order given, into an empty (2,4)-tree.

R-3.10 A certain Professor Amongus claims that a (2,4) tree storing a set of items will always have the same structure, regardless of the order in which the items are inserted. Show that Professor Amongus is wrong.