

This review exercise focuses on self-adjusting trees done three ways: (1) rotate-to-root (which does not work well), (2) bottom-up splaying, and (3) top-down splaying.

1. List the members of your group below. Underline your name.

2. Trace the insertion of the following keys, in the order listed, into an initially empty binary search tree that uses the *rotate-to-root* self-adjustment strategy. For each insertion, clearly indicate the ensuing rotations and resulting tree.

63 52 74 57 42 32 24 45

3. Repeat Question 2 using *bottom-up splaying* instead of rotate-to-root.

4. Repeat Question 3 using *top-down splaying* instead of bottom-up splaying.

[additional space for answering the earlier question]