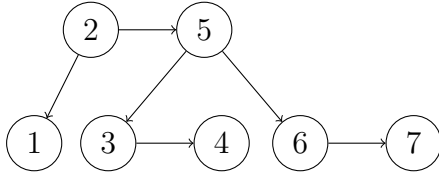1. List the members of your group below:

2. Depict all the stages in the restructuring of the following AA-tree when the key 1 is removed, clearly depicting the tree levels. It may be convenient to use dashed lines to separate tree levels, as in Andersson's paper.[1]

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[1]Arne Andersson, "Balanced Search Trees Made Simple," in *Proceedings of the Workshop on Algorithms and Data Structures* (Montreal, Canada, 1993).

1

[additional space for answering the earlier question]

3. Recall the definition of a *level-wise k-search-tree* from the homework assignment. Depict the *AA-tree* resulting from the sequential insertion of

$$11, 12, 13, \ldots, 20, 1, 2, 3, \ldots, 10$$

into an empty tree. You do not need to depict all intermediate trees. However, be sure to depict the tree immediately **before** the insertion of keys 17, 1, 3, and 5.

[additional space for answering the earlier question]