Introduction to Algorithm HW1 report

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Environment:

I edit the program on Windows10 PC with sublime/online IDE/github
Compiled with “g++ -o hw1 hw1.cpp” command in windows power shell (with g++ installed).
Execution is done on my windows 10 PC.

Method or solutions:

Insertion and deletion is quite similar.
To do an insertion, just put the new element at the end of the young tableau and move it according to the value of it and its neighbor until moving is no longer needed.
To do a (minimum) deletion, just put the last element at the position of the minimum of the young tableau and move it according to the value of it and its neighbor until requisition is satisfied.

Results:

The solution results in sqrt(n) time complexity to insert/delete an element to/from young tableau.
Furthermore, this means young table can be used as a heap-like data structure, suporting n*sqrt(n) heap sort / sqrt(n) searching, etc.