



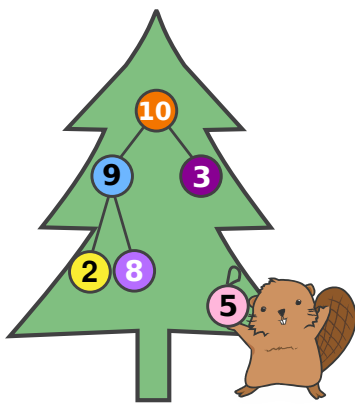
Decorating trees



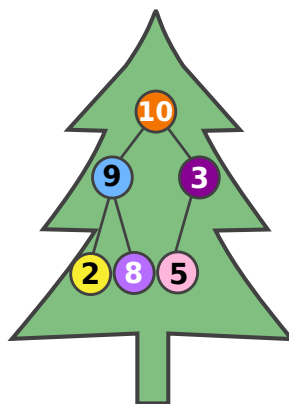
Every year, beavers decorate a tree with decorative balls of different weights. Each ball has its weight written on it. The beavers have created rules for decorating the tree:

1. Except for the topmost ball, every ball must hang from a ball directly above it.
2. Each ball can only have zero, one or two other balls hanging from it.
3. When a new ball is added, it is always added to the highest and leftmost ball that has zero or one balls already hanging from it.
4. If the new ball added is heavier than the ball directly above it, the two balls must swap places. If the new ball is still heavier than the ball directly above it, they must be swapped again, and so on.

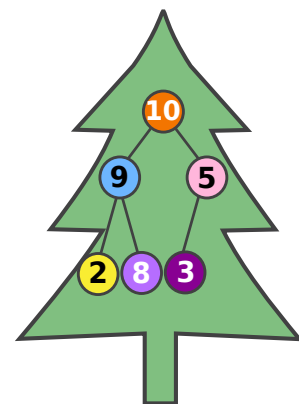
Here is an example of how a ball is added to a beaver tree:



1. Original Tree



2. Added Ball 5



3. Swapped Ball 5 and Ball 3

QUESTION

Which of these trees could have been decorated by the beavers?

