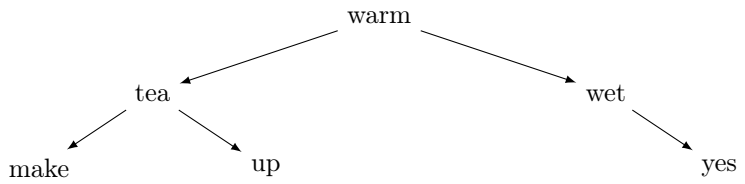
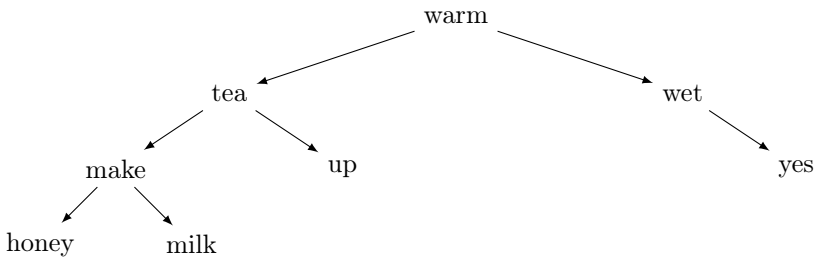
AVL Insert

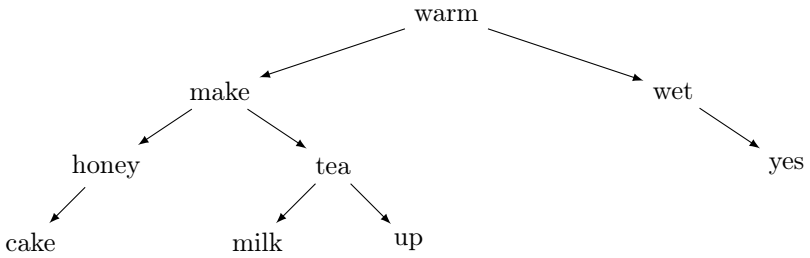
Starting tree:



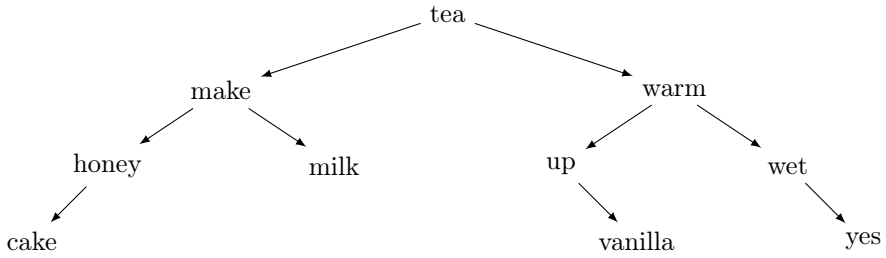
Insert honey, milk. No rotation.



Single rotation.

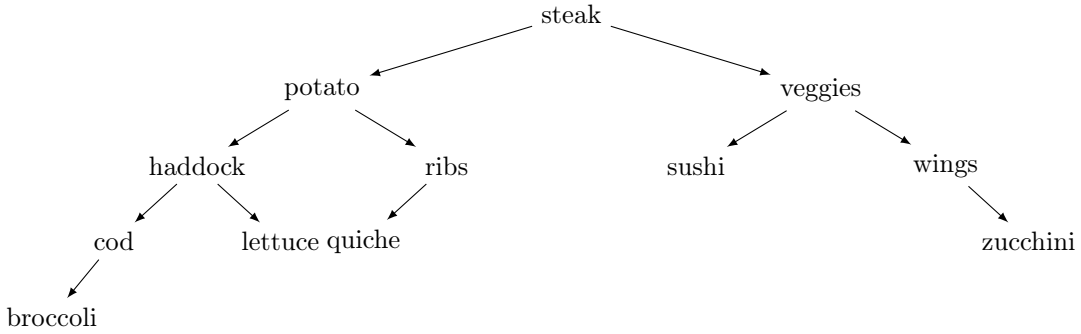


Double rotation.



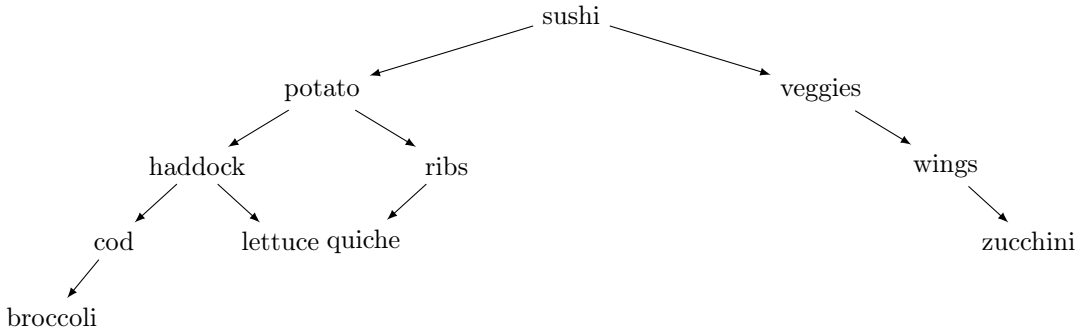
AVL Delete

Starting tree:

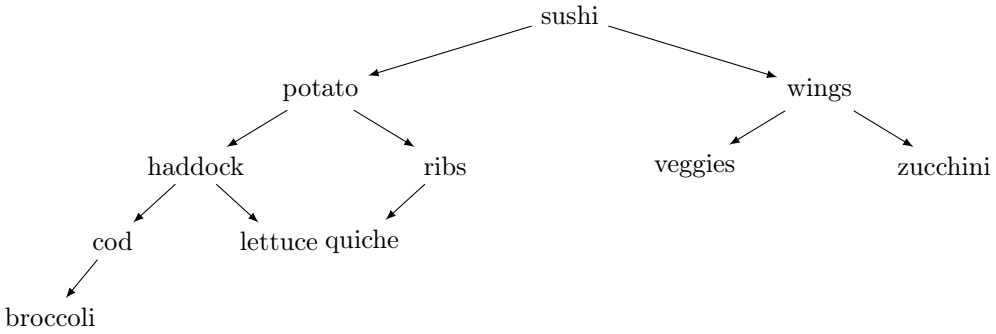


Delete steak. In this course, replace by successor sushi.

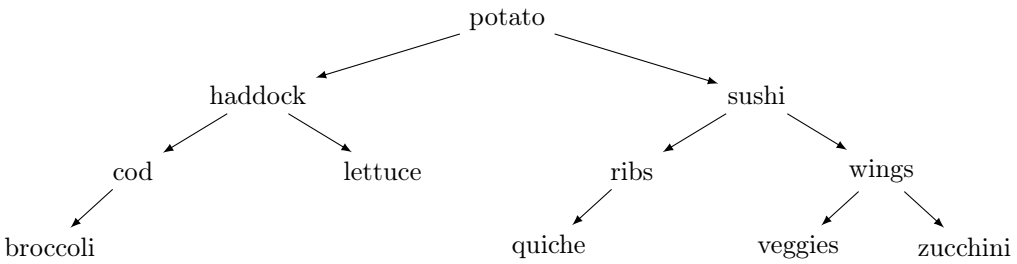
Rotations shown later.



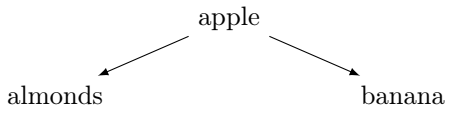
Single rotation at veggies.



Single rotation at root.


potato
haddock
sushi
cod
lettuce
ribs
wings
broccoli
quiche
veggies
zucchini

Now suppose you want to union the current tree with the following tree:



Notice that the keys are all alphabetically smaller in the almond tree than in the potato tree. Figure out *where* you want the almond tree to be situated in the potato tree. Can you come up with a general algorithm to union two trees when the keys of one AVL tree are alphabetically less than the keys of the other AVL tree.