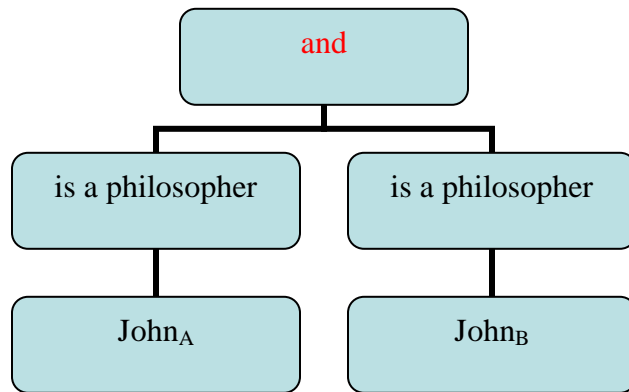First disambiguation of "John and John are philosophers" in the tree language:

Second disambiguation of "John and John are philosophers" in the tree language: