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Assignment #3 report

For the original forward chaining algorithm, I tried to do an iterative approach at first before realizing that it wasn't going to be the best solution forward. I switched to using a recursive solution once I realized that verifying each conjunct in the rule was the best way to go about the problem. I used classes in the file FOLlib.py because it made adjusting to the incremental forward chaining adjustments significantly easier.

For the unification algorithm, I essentially implemented the algorithm described in the assignment prompt. The algorithm listed there worked very effectively and it was relatively easy to implement.

The incremental forward chaining algorithm is essentially a variation of a dynamic programming problem. I used a two-dimension tabular data structure where each iteration represented a list of facts that was recently inferred on the previous iteration.