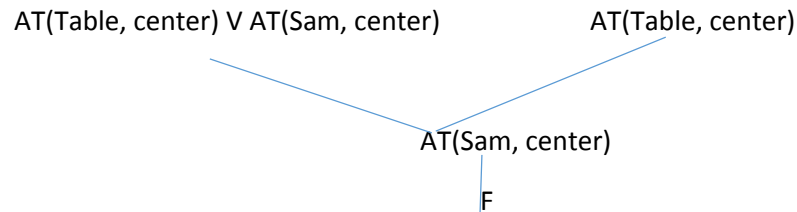


First, we have to check to see if $AT(Sam, Window) \wedge AT(Table, Niche)$ S_0 is true, and it is NOT, so we continue:

$S_0 = AT(Sam, door), AT(Table, center)$

Now, we check to see which (if any) of the operators are applicable:

Push? Let us assume $\exists x \neg AT(Table, x) \wedge \neg AT(Sam, x)$



So this doesn't apply, however we can move!

$Move(Door, Center)$ turns S_1 into: $AT(Sam, Center) \wedge AT(Table, Center)$

We repeat the above check for push, but this time the resolution comes up positive! Although so does the move, so we can choose either one. We just continue this search until we reach our goal state, the state diagram looks like the following:

