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r1 : if L1 is A and L1 is B then L2 is A
r2 : if L2 is A and L2 is C then L3 is A
r3 : if L1 is C then L2 is B
r4 : if L1 is D and L1 is E then L2 is C
r5 : if L1 is F then L2 is D
r6 : if L2 is B and L2 is D then L3 is B
r7 : if L2 is C and L2 is D then L3 is C
r8 : if L2 is A and L3 is A then L4 is A
r9 : if L3 is B and L3 is C then L4 is B
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L1 is A  
 L1 is B  
 L1 is D  
 L1 is E

The hypothesis is L4 is A

Stages	Goals	Working memory	Rule fired
Stage 0: Hypothesis: L4 is A	Begin goal L4 is A		
Stage 1: Rule 8 – Create subgoal L2 is A	Begin subgoal L2 is A		
Stage 2: Rule 1 – L1 is A and L1 is B is already in working memory	End subgoal L2 is A	Add L2 is A to WM	Rule 1
Stage 3: Rule 8 – Create subgoal L3 is A	Begin subgoal L3 is A		
Stage 4: Rule 2 – L2 is A is already in working memory. Create subgoal L2 is C	Begin subgoal L2 is C		
Stage 5: Rule 4 – L1 is D and L1 is E is already in working memory	End subgoal L2 is C	Add L2 is C to WM	Rule 4
Stage 6: Rule 2 – L2 is A and L2 is C is in working memory	End subgoal L3 is A	Add L3 is A to WM	Rule 2
Stage 7: L2 is A and L3 is A is in WM.	End goal L4 is A	Add goal L4 is A to WM	Rule 8