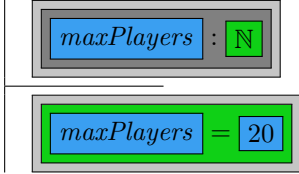
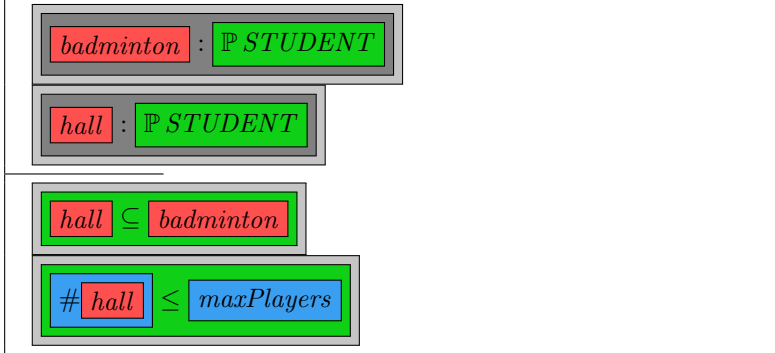


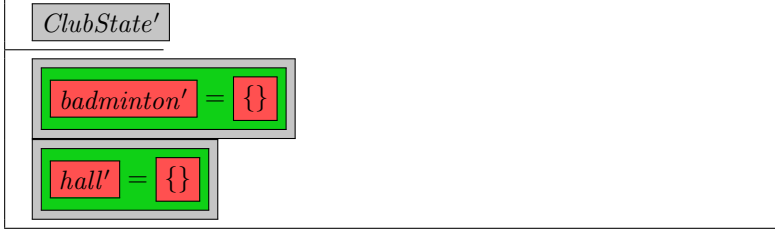
STUDENT



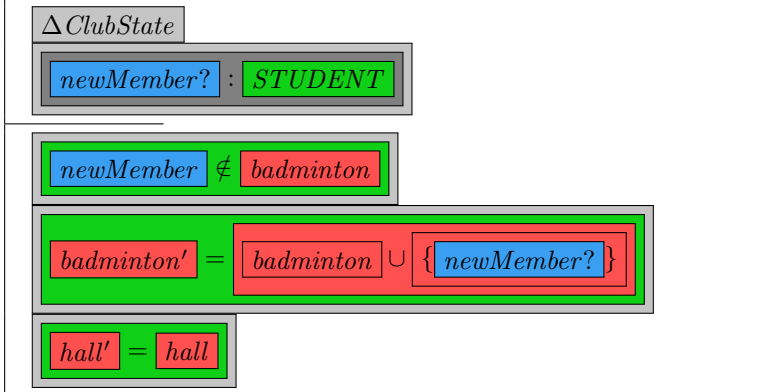
ClubState



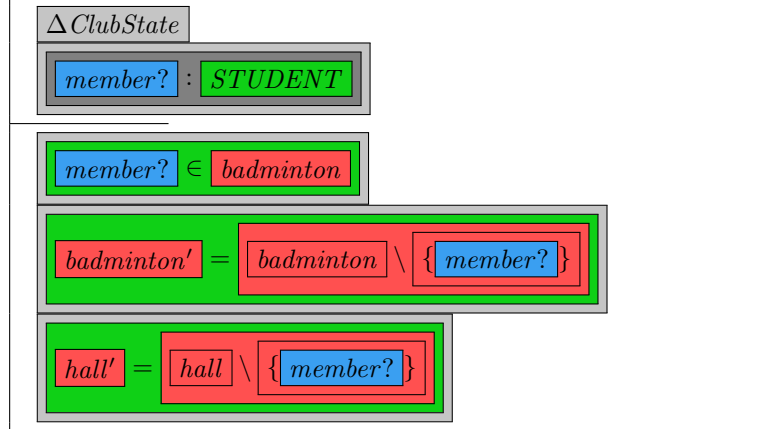
InitClubState



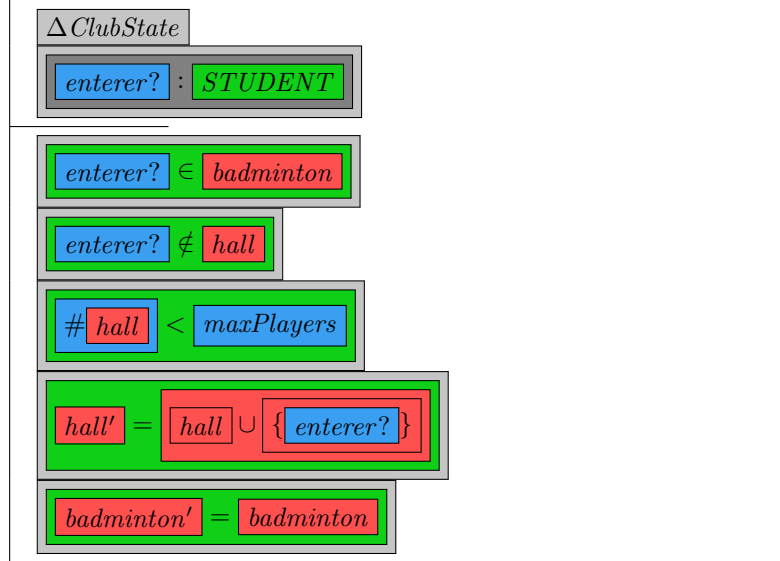
AddMember

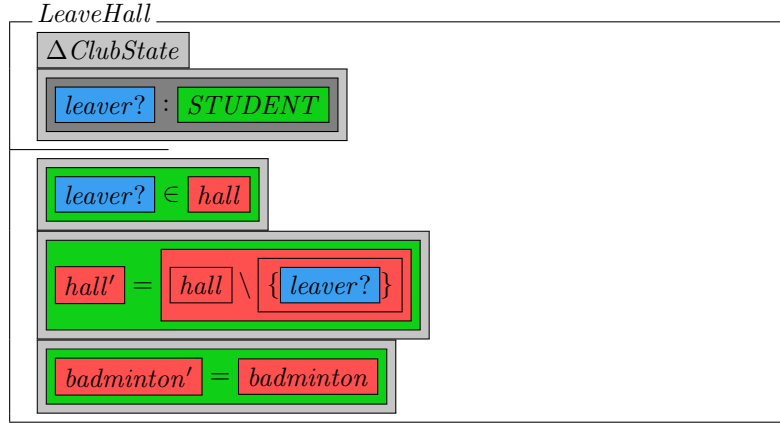


RemoveMember



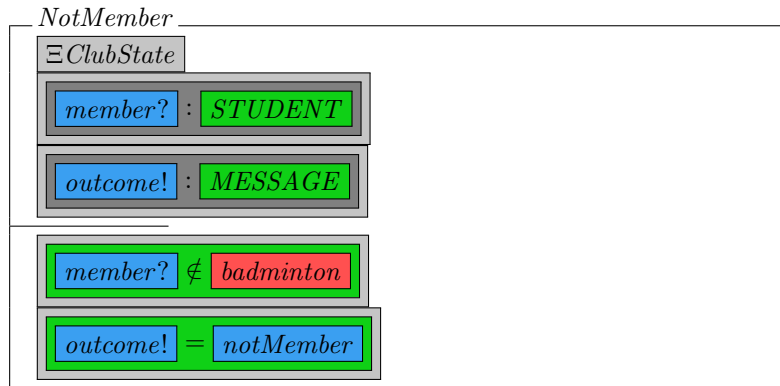
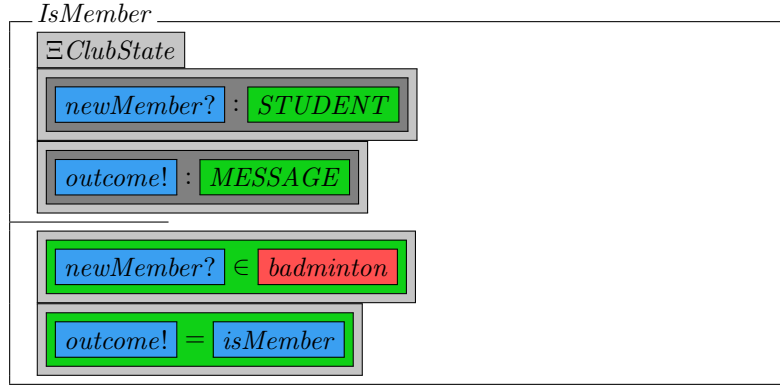
EnterHall

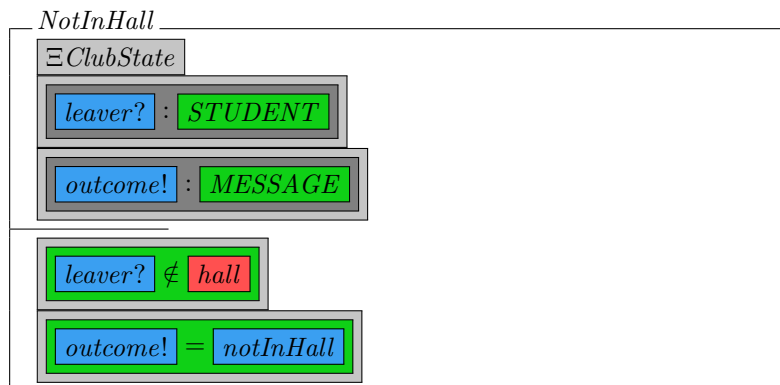
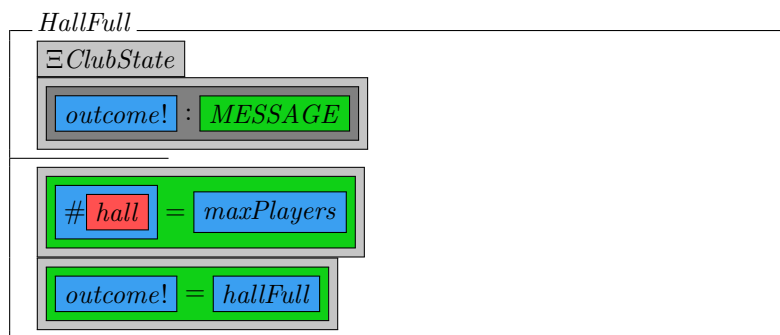
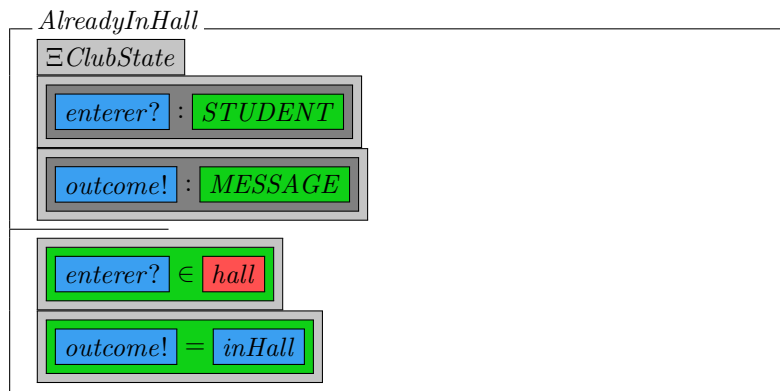




MESSAGE ::= *success* | *isMember* | *notMember* | *hallFull* | *inHall* | *notInHall*

SuccessMessage $\hat{=}$ $[outcome! : MESSAGE \mid outcome! = success]$





$$\begin{aligned}
TotalAddMember &\hat{=}\ (\text{AddMember} \wedge \text{SuccessMessage}) \vee \text{IsMember} \\
TotalRemoveMember &\hat{=}\ (\text{RemoveMember} \wedge \text{SuccessMessage}) \vee \text{NotMember} \\
TotalEnterHall &\hat{=}\ (\text{EnterHall} \wedge \text{SuccessMessage}) \vee \text{NotMember} \vee \text{AlreadyInHall} \vee \text{HallFull} \\
TotalLeaveHall &\hat{=}\ (\text{LeaveHall} \wedge \text{SuccessMessage}) \vee \text{NotInHall}
\end{aligned}$$