(5)	$P \to Q$	from 3, discharge 2
(6)	P	assume (again!)
(7)	Q & R	from 1,6 (same inference as at line 3)
(8)	R	from 7
(9)	$P \to R$	from 8, discharge 6
(10)	$(P \to Q)$ & $(P \to R)$	from 5,9

The redundancy of this proof is obvious. Nonetheless, an instructor who prefers subderivation style proofs can use our system by changing the rules concerning assumption sets as follows: (i) Every line has the assumption set of the immediately preceding line, except when an assumption is discharged. (ii) The only assumption available for discharge at a given line is the highest-numbered assumption in the assumption set. (iii) After an assumption has been discharged, that line number can never again appear in a later assumption set. (In other words, the assumption-set device becomes a stack or a first-in-last-out memory device.)

There are a number of other differences between our system and Lemmon's, including a different set of primitive rules of proof. What follows is a listing of the more significant differences between our system and Lemmon's, together with reasons we prefer our system.

- Lemmon disallows vacuous discharge of assumptions. We allow it. Thus it is correct in our system to discharge an assumption by reductio ad absurdum when the contradiction does not depend on that assumption. Whenever vacuous discharge occurs, one can obtain a Lemmon-acceptable deduction by means of trivial additions to the proof. We prefer to avoid these additions. (Note that Lemmon's preclusion of vacuous discharge means that accomplishing the same effect requires redundant steps of &-introduction and &-elimination. For instance, Lemmon requires (a) to prove $P \vdash Q \to P$, while we allow (b).

(a)

1	(1)	P	assume
2	(2)	Q	assume
1,2	(3)	P & Q	from 1,2
1,2	(4)	P	from 3
1	(5)	$Q \to P$	from 4, discharge 1