1

Here's what an example tree would look like:

$$\frac{\Gamma \Rightarrow \Delta, D \qquad D, \Gamma' \Rightarrow \Delta'}{\Gamma, \Gamma' \Rightarrow \Delta, \Delta'} \text{ R}$$

If an inference is made from one premiss to a conclusion, it looks like this:

$$\frac{D, \Gamma' \Rightarrow \Delta'}{\Gamma \Rightarrow \Delta, D} \text{ R}$$

If height needs to be kept track of, here's how I did it:

$$\frac{\vdash_{n+m} D, \Gamma' \Rightarrow \Delta'}{\vdash_{n+m+1} \Gamma \Rightarrow \Delta, D} \text{ R}$$

An example of branching derivation with the heights kept at the left:

$$\dfrac{\dfrac{\dfrac{}{\vdash_{n+m-1} A, B \Rightarrow A}\,init \qquad \dfrac{}{\vdash_{n+m-1} A, B \Rightarrow B}\,init}{\vdash_{n+m} A, B \Rightarrow A \wedge B}\,R\wedge}{\vdash_{n+m+1} A \wedge B \Rightarrow A \wedge B}\,L\wedge$$