I try to prove that \( \neg P \lor Q, P \lor \neg Q \vdash P \leftrightarrow Q \).
The first premiss is $\neg P \lor Q$. I try to apply $\lor$Elim.

$\neg P \lor Q$
So I assume \( \neg P \) and \( Q \).
I want to prove $Q$ from $P$. Combining this with a proof of $P$ from $Q$ will allow me to prove the conclusion. To derive $Q$ from $P$ I assume $P$. 

\[
\neg P \lor Q, \quad P \lor \neg Q \vdash P \leftrightarrow Q
\]
I apply \( \neg \text{Elim} \) to \( \neg Q \), which has not been assumed. This gives \( Q \).
Now I can apply ∨Elim and discharge the assumptions ¬P and Q.
To prove $P$ from $Q$ I proceed in an analogous way.
Now I can apply $\leftrightarrow$Intro and discharge $P$ in the proof on the left and $Q$ in the proof on the right.