

Dednat6: a demo for underbrace2d.lua

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Output:

$$\begin{array}{ccc}
 \underbrace{\underbrace{(\neg\neg P)}_{10}}_{02} \rightarrow \underbrace{P}_{10} & & \neg(\underbrace{P}_{10} \wedge \underbrace{Q}_{01}) \rightarrow (\underbrace{\neg P}_{10} \vee \underbrace{\neg Q}_{01}) \\
 \underbrace{\quad\quad\quad}_{20} & & \underbrace{\quad\quad\quad}_{00} \quad \underbrace{\quad\quad\quad}_{02} \quad \underbrace{\quad\quad\quad}_{20} \\
 \underbrace{\quad\quad\quad}_{12} & & \underbrace{\quad\quad\quad}_{32} \quad \underbrace{\quad\quad\quad}_{22} \\
 & & \underbrace{\quad\quad\quad}_{22}
 \end{array}$$

$$\begin{array}{ccc}
 T(\neg(\underbrace{P}_{\square P} \wedge \underbrace{Q}_{\square Q})) \rightarrow (\underbrace{\neg P}_{\square \neg P} \vee \underbrace{\neg Q}_{\square \neg Q}) \\
 \underbrace{\square P \wedge \square Q}_{\square \neg(\square P \wedge \square Q)} & & \underbrace{\square \neg P \vee \square \neg Q}_{\square \neg(\square P \vee \square \neg Q)} \\
 \underbrace{\square \neg(\square P \wedge \square Q)} & & \underbrace{\square \neg(\square P \vee \square \neg Q)} \\
 \underbrace{\square((\square \neg(\square P \wedge \square Q)) \rightarrow (\square \neg(\square P \vee \square \neg Q)))}
 \end{array}$$

Source (for the upper right diagram):

```

%UB  \neg(P \wedge Q) \rightarrow (\neg P \vee \neg Q)
%UB  -- --      -- --
%UB  10 01      10  01
%UB  ----
%UB   00      02  20
%UB  -----
%UB   32      22
%UB  -----
%UB           22
%L
%L  defub "demorgan"
%
$$\pu
  \ub{demorgan}
$$

```