

Exercise 4

$$\begin{aligned}
 & \left[\left(\begin{array}{l} \text{local } y, z \text{ in} \\ y = 15 \\ \{LB \ 5 \ z\} \\ \{Browse \ z\} \\ \text{end} \end{array} \right), \{y \rightarrow y, LB \rightarrow lb\} \right] \left\{ y = 10, lb = (\text{proc } \{x \ z\} \text{ if } x \geq y \text{ then } z = x \right. \\
 & \qquad \qquad \qquad \left. \text{else } z = y \text{ end, } \{y \rightarrow y\}) \right\} \\
 & \qquad \qquad \qquad \vdots \\
 & \left[\left(\begin{array}{l} \text{if} \\ \{Browse \ z\} \end{array} \right), \left(\begin{array}{l} x \rightarrow w, \\ \{y \rightarrow y, LB \rightarrow lb, z \rightarrow ?\} \\ \{y \rightarrow y2, LB \rightarrow lb, z \rightarrow ?\} \end{array} \right) \right] \left\{ y = 10, lb = (\text{proc } \dots), y2 = 15, z = \right. \\
 & \qquad \qquad \qquad \left. w = 5 \right\} \\
 & \qquad \qquad \qquad \downarrow \\
 & \left[(\{Browse \ z\}), \{ \} \right] \{y = 10, lb = (\text{proc } \dots), y2 = 15, w = 5, z = 10\}
 \end{aligned}$$