$$
\begin{aligned}
E &::= [] \\
&\mid (+\ E\ expr) \\
&\mid (+\ val\ E) \\
&\mid (\textsf{set!}\ var\ E) \\
&\mid (\textsf{begin}\ E\ expr) \\
\sigma &::= ([var\ val]\ ...) \\
state &::= (program\ /\ (inst\ ...)\ /\ (inst\ ...)) \\
inst &::= (id\ phase) \\
st &::= (\sigma\ /\ state)
\end{aligned}
$$