1. Use the grammar shown below to create the start state and all the states one transition away from the start state in the Canonical Collection (I called this the LR1 machine). You probably what to review the second lecture on LR1 parsing before you do this quiz. You can have until Saturday to submit your answer.

\[
\begin{align*}
S & \rightarrow E \\
E & \rightarrow E \, + \, T \\
E & \rightarrow T \\
T & \rightarrow T \, * \, F \\
T & \rightarrow F \\
F & \rightarrow ( \, E \, ) \\
F & \rightarrow \text{id}
\end{align*}
\]