

In the following questions, consider the following grammar:

$$\begin{aligned} S_0 &\rightarrow E \\ E &\rightarrow \text{id} \\ E &\rightarrow \text{id} (E) \\ E &\rightarrow E + \text{id} \end{aligned}$$

1. Build the LR(0) DFA (*i.e.*, states and goto edges) for the following grammar:
2. Is this grammar LR(0)?
3. Build the SLR parsing table for the grammar.