Consider the grammar

$$S \to 0S1 \mid 01$$

$$S \to +SS \mid *SS \mid a$$

$$S \to S(S)S \mid \varepsilon$$

$$S \to SS + \mid SS * \mid a$$

- 1) Construct the collection of sets of LR(0) items for the grammar.
- 2) Construct the GOTO functions
- 3) Are there conflicts
- 4) Construct the parsing table if it is possible