Assignment - VII Compiler Design Laboratory (CS3075)
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1. Design a parser:

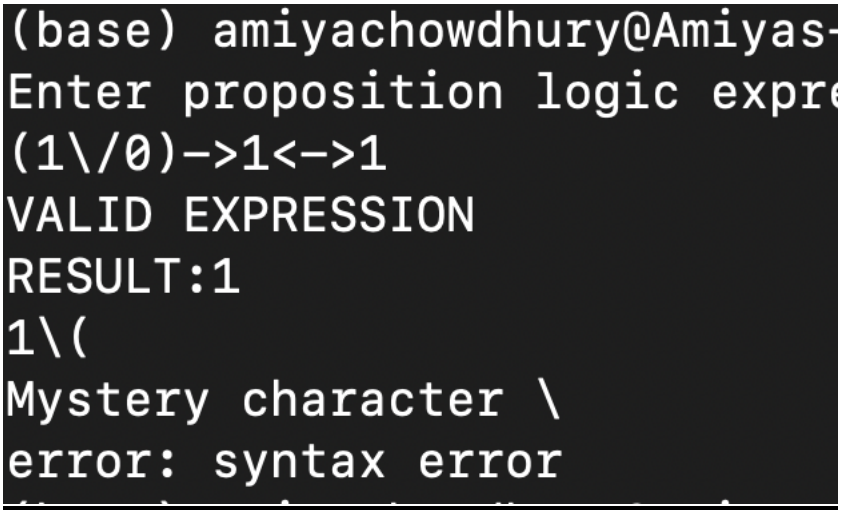
Valid Tokens
1. A-Z (excluding T and F), a-z (excluding t and f) are tokens of length 1 represent Boolean variables
whole values are either T/t for true or F/f for false.
2. T/t and F/f are constants representing true and false respectively.
3. Operator /\ stands for 'AND'.
4. Operator \/ stands for 'OR'.
5. Operator ~ stands for 'NOT'.
6. Operator -> stands for 'implication'.
7. Operator <-> stands for 'if and only if'.
8. Operator (stands for 'opening parenthesis'.
9. Operator) stands for 'closing parenthesis'.

Operator Precedence Associativity

maximum () Left
~ Right
<-> Left
-> Left
/\ Left
minimum \/ Left

Solution File: ***lab7.l*** **,** ***lab7.y***

Working Screenshot:



Note: The program correctly identifies if the sentence can be derived from the grammar. However, the program expects the input to have the truth values (0/1) directly and not variables. The result of the expression is displayed if the statement is correct grammatically. The implementation uses Bison underneath and inspiration from the calculator program of the first laboratory to achieve the results.