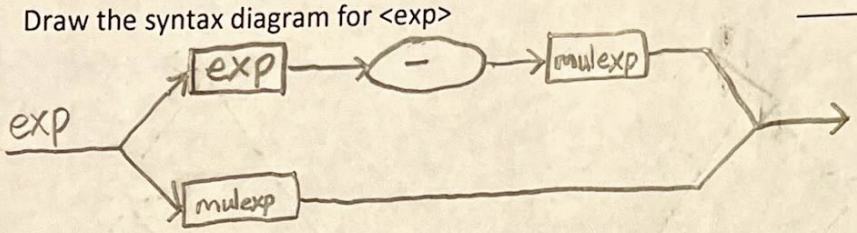
3. Consider the following grammar:

<exp> ::= <exp> - <mulexp> | <mulexp>

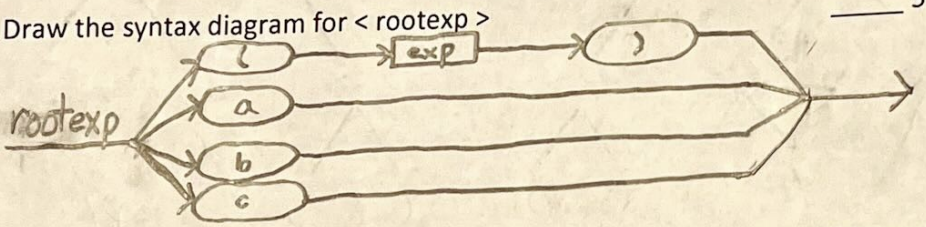
<mulexp> ::= <mulexp> * <rootexp> | <rootexp>

<rootexp> ::= (<exp>) | a | b | c

a. Draw the syntax diagram for <exp> _____ 5



b. Draw the syntax diagram for < rootexp > _____ 5



c. Modify this grammar to add subtraction and division operators (+ and / respectively) with the customary (BODMAS) precedence and (left) associativity. _____10

Answer on seperate attached sheet

4. Draw the classical sequence (with all the different file types) that a program goes through on the journey from being a high level language source file to a running program in memory. _____5