CS 354 - LANGUAGE PROCESSORS LAB

LP LAB ASSIGNMENT

1. Write a program to design LALR parsing using YACC.

2. Write a program in YACC to convert binary to decimal (including fractional numbers)

3. Write a program in YACC to generate syntax tree, three address code and DAG for a given expression.

4. Write a program to generate a symbol table using words in a given English text. Also include rules to recognise words like "can't" as a single word. Use a normal table for storing words, their frequency and unique line numbers in which the word appears.

5. Write a program to find LR(0) items for the following expression grammar and construct SLR table assuming that the operators '+' and '*' are right associative and + has higher precedence than *

$$E \rightarrow E + E \mid E * E \mid (E) \mid id$$

6. Write a program to find LR(1) items for the following expression grammar and construct Canonical LR table assuming that the operators '+' and '*' are right associative and + has higher precedence than *

$$E \rightarrow E + E \mid E * E \mid (E) \mid id$$

7. Write a program to construct a LALR parse table for a given grammar and show the derivation sequence for an input string of the grammar.

8. Write a program to design a predictive parser (Construct the parse table for the grammar and show the derivation sequence for an input string of the grammar).

9. Write a program to implement operator precedence parsing (Precedence table is given and do parsing from precedence table).

10. Write a program to generate intermediate code using Back- patching technique