**Compiler Design (Lab 5)**

**Problem: (Exercises are from the Dragon Book)**

1. (Exercise 4.9.1) Write a Yacc program that takes boolean expressions as input [as given by the grammar of Exercise 4.2.2(g)] and produces the truth value of the expressions.

2. (Exercise 4.9.2) Write a Yacc program that takes lists (as defined by the grammar of Exercise 4.2.2(e) , but with any single character as an element, not just a ) and produces as output a linear representation of the same list; i.e., a single list of the elements, in the same order that they appear in the input.

3. (Exercise 4.9.3) Write a Yacc program that tells whether its input is a palindrome (sequence of characters that read the same forward and backward).

**Input-Output:**

1. The program creates a parser for the user to enter true or false as tokens to perform boolean operations.

2. The program creates a parser for the user to create lists as given in the grammar.

3. The program creates a parser for the user to enter a string to output whether the string is palindrome or not.

**Compiling Instructions:**

For 1st and 2nd questions, YACC can be used for compiling but for the 3rd question BISON is to be used.

lex com1.l

yacc com1.y

gcc y.tab.c -ly -ll

lex com2.l

yacc com2.y

gcc y.tab.c -ly -ll

lex com3.l

yacc com3.y

gcc com3.tab.c -lfl