

## BCSE III – Compiler Design Lab

### Assignment 2

1. Learn how to use YACC (several tutorials are available on the Internet.)

Design a grammar to recognise a string of the form AA...ABB...B, i.e. any number of As followed by any number of Bs. Use LEX or YACC to recognise it. Which one is a better option?

Change your grammar to recognise strings with equal numbers of As and Bs - now which one is better?

2. Write the lex file and the yacc grammar for an expression calculator. You need to deal with

- i) binary operators '+', '\*', '-';

- ii) unary operator '-';

- iii) boolean operators '&', '|'

- iv) Expressions will contain both integers and floating point numbers (up to 2 decimal places).

Consider left associativity and operator precedence by order of specification in yacc.