Compiler Design Hw2_109062110_祝語辰 Report

1. Explain the Lex-Yacc interaction

In Lex, it scanned the program and divide it into several tokens, with its corresponding token type and the value of the token. The value will store in yyval which is declare in “parse.y”. This information will store in $1,$2… . The parser yyac will then generate a syntax tree base on the grammar written in parse.y. Every time the parser receive a token, the main function of the parser.y will call yylex again to receive next token.

2. Describe your understanding on the difficulties you faced.

The difficulty is that I doesn’t familiar with the LALR(1) grammar, so that I cannot complete these homework in time.
Besides, modify my the scanner.l to satisfy the requirement of the parse.y also took me sometime, as the regular expression in my previous homework is overcomplicated.

3. Describe how you tried to overcome those difficulties

I tried to first convert the scanner.l into correct form and do my best to understand the LALR(1) as soon as possible.