

CIIC 4030/ICOM 4036 Programming Languages

Assignment #2

Given the lexical analyzer implemented in assignment #1, add the parsing code using PLY to recognize the following grammar rules:

```
Exp          ::= Term { Binop Exp }
              | if Exp then Exp else Exp
              | let Def+ in Exp
              | map IdList to Exp
Term         ::= Unop Term
              | Factor { ( ExpList ) }
              | Null
              | Int
              | Bool
Factor       ::= ( Exp ) | Prim | Id
ExpList      ::= { PropExpList }
PropExpList  ::= Exp | Exp , PropExpList
IdList       ::= { PropIdList }
PropIdList   ::= Id | Id , PropIdList
Def ::= Id := Exp ;
```

Note: Your program must be tested with two files provided. Write a short report (1 page) describing the results of each test and the experience developing the scanner/parser using PLY. Submit both code and short report in Moodle.