

EBNF Description

Karan Aggarwal

2019CS10699

```
program := {statement} .
statement := formula TERM .
TERM := ";" .
formula := formula1 ELSE formula | formula3 .
ELSE := "ELSE" .
formula1 := formula2 THEN formula .
THEN := "THEN" .
formula2 := IF formula .
IF := "IF" .
formula3 := formula4 IMPLIES formula3 | formula4 .
IMPLIES := "IMPLIES" .
formula4 := formula4 AND formula5 |
            formula4 OR formula5 |
            formula4 XOR formula5 |
            formula4 EQUALS formula5 |
            formula5 .
AND := "AND" .
OR := "OR" .
XOR := "XOR" .
EQUALS := "EQUALS" .
formula5 := NOT formula5 | formula6 .
formula6 := LPAREN formula RPAREN | CONST | ID .
LPAREN := "(" .
RPAREN := ")" .
NOT := "NOT" .
CONST := "TRUE" | "FALSE" .
ID := Alpha {Alpha} .
Alpha := "A" | "B" | "C" | "D" | "E" | "F" | "G" | "H" | "I" | "J" | "K" | "L" | "M" | "N" | "O" |
         "P" | "Q" | "R" | "S" | "T" | "U" | "V" | "W" | "X" | "Y" | "Z" | "a" | "b" | "c" | "d" |
         "e" | "f" | "g" | "h" | "i" | "j" | "k" | "l" | "m" | "n" | "o" | "p" | "q" | "r" | "s" |
         "t" | "u" | "v" | "w" | "x" | "y" | "z" .
```