Github code : https://github.com/Prah06/Programming_lang_hw

1)code is in github and python file lex_analyser_hw3
2)<stmt> -> <var> = <expression>
<var> -> A|B|C
<expression>-><expression>+<term>
|<expression>-<term>
|<term>
<term>-> <term>*<factor>
|<term>/<factor>
|<term>%<factor>
|<factor>
<factor>-><pow>^<factor>
|<pow>
<pow>-> (<expression>)|<var>|<int_lit>

3)<stmt> -> <var> = <expression>
<var> -> A|B|C
<expression> -> <term>+<expression>
| <term>-<expression>
| <term>
<term> -> <factor>*<term>
| <factor>/<term>
| <factor>%<term>
| <factor>
<factor> -> <pow>^<factor>
| <pow>
<pow> -> (<expression>)|<var>|<int_lit>

4) Decision tree for left associative is in the file cfg_leftassociative
Decision tree for right associative is in the file rfg_assocaitive

I did both of these using the mural application for the presentation of the diagram of decision tree

5) 1) for i := 0; i < 10; i += 1 {}
for i := 0; i < 10; i = i + 1 {}
for i := 0; i <= 10; i++ {}
for i := 0; i != 10; i++ {}
for i := 1; i <= 10; i++ {}
for i := 10; i > 0; i-- {}
for i := 10; i >= 0; i-- {}
for ; ; PrimaryExpr {}
for PrimaryExpr; ; {}
for PrimaryExpr; ; PrimaryExpr {}

6)the last ones were long so i drew them on note book