

Grammar Rules

```
STATEMENT_LIST :=  
    STATEMENT_LIST STATEMENT  
    | STATEMENT  
    ;
```

```
ENDIF_STATEMENT_LIST :=  
    STATEMENT_LIST END_IF  
    ;
```

```
ELSE_STATEMENT_LIST :=  
    STATEMENT_LIST ELSE  
    ;
```

```
ENDWHILE_STATEMENT_LIST :=  
    STATEMENT_LIST END_WHILE  
    ;
```

```
STATEMENT :=  
    WHILE EXPRESSION ENDWHILE_STATEMENT_LIST  
    | IF EXPRESSION ENDIF_STATEMENT_LIST  
    | IF EXPRESSION ELSE_STATEMENT_LIST ENDIF_STATEMENT_LIST  
    | VAR EXPRESSION  
    | SAY EXPRESSION  
    | OUTPUT EXPRESSION EXPRESSION  
    | VAR AS_PLUS EXPRESSION  
    | VAR AS_MINUS EXPRESSION  
    | VAR AS_MULT EXPRESSION  
    | VAR AS_DIV EXPRESSION  
    | VAR AS_POW EXPRESSION  
    | VAR AS_MOD EXPRESSION  
    ;
```

```
EXPRESSION :=  
    NUM  
    | VAR  
    | EXPRESSION EX_PLUS EXPRESSION  
    | EXPRESSION EX_MINUS EXPRESSION  
    | EXPRESSION EX_MULT EXPRESSION  
    | EXPRESSION EX_DIV EXPRESSION  
    | EX_MINUS EXPRESSION  
    | EXPRESSION EX_POW EXPRESSION  
    | EXPRESSION EX_MOD EXPRESSION  
    | EXPRESSION EX_EQ EXPRESSION  
    | EXPRESSION EX_GT EXPRESSION  
    | EXPRESSION EX_LT EXPRESSION  
    | EXPRESSION EX_LE EXPRESSION  
    | EXPRESSION EX_GE EXPRESSION  
    | EXPRESSION EX_NE EXPRESSION  
    | EX_CLAIMATION EXPRESSION  
    | LPAREN EXPRESSION RPAREN  
    ;
```