```
GUI SETS
P ->A
                              ID, print, read, case, while, {
A \rightarrow S A'
                              ID, print, read, case, while, {
A' ->; S A'
                                           EOF, }
A' \rightarrow \epsilon
S \rightarrow ID := E
                                              ID
S \rightarrow print (E)
                                             print
S \rightarrow read (ID)
                                             read
S ->case W else S
                                             case
S \rightarrow while (B) S
                                             while
S \to \{A\}
                                               {
W ->C W'
                                             when
W' \rightarrow C W'
                                             when
W' ->\epsilon
                                              else
C \rightarrow when (B) S
                                             when
                                         (, NUM, ID
B ->E RELOP E
E \rightarrow T E'
                                         (, NUM, ID
E' -> + T E'
                                               +
E' ->- T E'
                            ;, EOF, ), RELOP, when, else, \}
E' \rightarrow \epsilon
T ->F T'
                                         (, NUM, ID
T' ->* F T'
T' ->/ F T'
                         +, -, ;, EOF, ), RELOP, when, else, }
T' \rightarrow \epsilon
F ->(E)
F \rightarrow NUM
                                             NUM
F \rightarrow ID
                                              ID
```