```
r_1 :< fichier > \rightarrow with Ada.Text_IO; use Ada.Text_IO; procedure < ident > is < fichier >_2
r_2 :< fichier >_2 \rightarrow \text{begin} < instr >^+ \text{end} < fichier >_3
                       \rightarrow < decl >^+ begin < instr >^+ end < fichier >_3
r_3:
r_4 :< fichier >_3 \rightarrow ; EOF
                      \rightarrow < ident >; EOF
r_6 : < decl >
                       \rightarrow type < ident > < decl >_{11}
                       \rightarrow procedure < ident > < decl >_{21}
                       \rightarrow function < ident > < decl >_{31}
r_8:
                       \rightarrow \langle ident \rangle_{\cdot}^{+} : \langle ident \rangle \langle decl \rangle_{41}
r_{10} : < decl >_{11} \rightarrow ;
r_{11} :
                      \rightarrow is record < champs > + end record;
r_{12} : < decl >_{21} \rightarrow \text{is} < decl >_{22}
r_{13}:
                      \rightarrow < params >  is < decl >_{22}
r_{14} : < decl >_{22} \rightarrow begin < instr >^+ end < decl >_{23}
r_{15}: \rightarrow < decl >^+ begin < instr >^+ end < decl >_{23}
r_{16} : < decl >_{23} \rightarrow ;
r_{17}:
                      \rightarrow < ident > ;
r_{18} : < decl >_{31} \rightarrow \text{return} < ident > \text{is} < decl >_{22}
                       \rightarrow < params > \text{return} < ident > \text{is} < decl >_{22}
r_{20} : < decl >_{41} \rightarrow ;
                      \rightarrow := < expr >;
r_{22} : < champs > \rightarrow < ident > + : < ident > ;
```

 $r_{23} : < params > \rightarrow (< param > ^+_:)$

```
\rightarrow < ident > ^+ : < param >_2
r_{24} : < param >
r_{25} :< param >_2

ightarrow < ident >
r_{26}:
                                \rightarrow < mode > < ident >
r_{27} :< mode >
                           \rightarrow in < mode >_1
r_{28} :< mode >_1
                                \rightarrow \mathrm{out}
r_{29}:
                                \rightarrow \land
                          \rightarrow N_1 < disjonction >
r_{30} :< expr >
r_{31} : < disjonction > \rightarrow \text{ or } < expr >
r_{32}:
                                \rightarrow or else < expr >
                                \rightarrow \land
r_{33}:
r_{34}: N_1
                                \rightarrow N_2 < conjonction >
r_{35} :< conjonction > \rightarrow and N_1
                                \rightarrow and then N_1
r_{36}:
r_{37}:
                                \rightarrow \land
                                \rightarrow N_3 < comparaison_1 >
r_{38}:N_2
r_{39} :< comparaison_1 > \rightarrow = N_2
                                \rightarrow /= N_2
r_{40}:
                                \rightarrow \land
r_{41} :
                                \rightarrow N_4 < comparaison_2 >
r_{42}:N_3
r_{43} :< comparaison_2 > \rightarrow > N_3
                             \rightarrow >= N_3
r_{44}:
                               \rightarrow < N_3
r_{45}:
                              \rightarrow <= N_3
r_{46}:
r_{47}:
                                \rightarrow \land
r_{48}:N_4
                                \rightarrow N_5 < operation_1 >
r_{49} : < operation_1 > \longrightarrow +N_4
                                \rightarrow -N_4
r_{50}:
                                \rightarrow \wedge
r_{51}:
r_{52}:N_{5}
                                \rightarrow < negation > < operation<sub>2</sub> >
r_{53} :< operation_2 >
                                \rightarrow *N_5
                                \rightarrow /N_5
r_{54}:
                                \rightarrow remN_5
r_{55} :
                                \rightarrow \land
r_{56}:
```

 $r_{57} :< negation >$

 r_{58} : r_{59} :

 \rightarrow < axiome > \rightarrow - < axiome >

 $\rightarrow not < axiome >$

```
r_{60} :< axiome >
                              \rightarrow < entire > < axiome ><sub>recur</sub>
r_{61}:
                              \rightarrow < caractere > < axiome >_{recur}
                              \rightarrow true < axiome >_{recur}
r_{62}:
                              \rightarrow false < axiome >_{recur}
r_{63}:
r_{64}:
                              \rightarrow null < axiome >_{recur}
r_{65}:
                              \rightarrow character 'val (\langle expr \rangle) \langle axiome \rangle_{recur}
                              \rightarrow (< expr >) < axiome >_{recur}
r_{66} :
                              \rightarrow < ident > < axiome >_1
r_{67}:
r_{68} : < axiome >_{recur} \rightarrow . < ident > < axiome >_{recur}
r_{69}:
                              \rightarrow \land
r_{70} :< axiome >_1
                              \rightarrow < axiome >_{recur}
                              \rightarrow (\langle expr \rangle^+) \langle axiome \rangle_{recur}
r_{71} :
r_{72} :< instr >
                             \rightarrow < ident > < instr >_1
                              \rightarrow - < axiome > < suite > . < ident > := < expr >;
                              \rightarrow not < axiome > < suite > . < ident > := < expr >;
r_{74}:
                              \rightarrow < entire >< axiome ><sub>recur</sub> < suite > . < ident > := < expr >;
r_{75}:
                              \rightarrow < caractere > < axiome >_{recur} < suite > . < ident > := < expr >;
r_{76}:
                              \rightarrow true < axiome >_{recur} < suite > . < ident > := < expr >;
r_{77} :
                              \rightarrow false < axiome >_{recur} < suite > . < ident > := < expr >;
r_{78} :
r_{79}:
                              \rightarrow null < axiome >_{recur} < suite > . < ident > := < expr >;
                              \rightarrow character'val(< expr >) < axiome >_{recur} < suite > . < ident > := < expr >;
r_{80}:
                              \rightarrow (\langle expr \rangle) \langle axiome \rangle_{recur} \langle suite \rangle . \langle ident \rangle := \langle expr \rangle;
r_{81} :
                              \rightarrow return < instr>_2
r_{82} :
                              \rightarrow begin < instr > + end;
r_{83}:
                              \rightarrow if \langle expr \rangle then \langle instr \rangle^+ \langle instr \rangle_3
r_{84}:
                              \rightarrow {\rm for} < ident > {\rm in} < instr >_4
r_{85} :
                              \rightarrow while \langle expr \rangle loop \langle instr \rangle^+ end loop;
r_{86} :
                              \rightarrow put(\langle expr \rangle);
r_{87}:
r_{88} :< instr >_1
                              \rightarrow := < expr >;
r_{89} :
                              \rightarrow (\langle expr \rangle_{\cdot}^{+}) \langle instr \rangle_{11}
r_{90} :
                              \rightarrow . < ident > < suite > . < ident > := < expr > ;
r_{91} :
                              \rightarrow < suite > . < ident > := < expr > ;
r_{92}:
r_{93} :< instr >_{11}
                              \rightarrow;
                              \rightarrow < axiome >_{recur} < suite > . < ident > := < expr > ;
r_{94}:
```

Pour abréger on note $< suite > = < operation_2 > < operation_1 > < comparaison_2 > < comparaison_1 > < conjonction > < disjonction > < conjonction > < conjo$

```
r_{95} : < instr >_2 \longrightarrow < expr >;
r_{96} :
r_{97} : < instr >_3 \longrightarrow \text{end if};
                                \rightarrow else < instr > + end if;
r_{98} :
                                \rightarrow < elsif > ^+ < instr >_3
r_{99} :
r_{100} : < instr >_4 \longrightarrow < expr > ... < expr > loop < instr >^+ end loop;
                                \rightarrow reverse \langle expr \rangle ... \langle expr \rangle loop \langle instr \rangle^+ end loop;
r_{101}:
r_{102} : < instr >^+ \rightarrow < instr > < instr >^+_1
r_{103} :< instr > ^+_1 \longrightarrow < instr > ^+
r_{104}:
r_{105} : < decl > ^+ \longrightarrow < decl > < decl > ^+_1
r_{106} : < decl > ^+_1 \longrightarrow < decl > ^+
r_{107}:
r_{108} : \langle champs \rangle^+ \rightarrow \langle champs \rangle^+_1
r_{109} : \langle champs \rangle_1^+ \rightarrow \langle champs \rangle_1^+
r_{111} : \langle ident \rangle_{,}^{+} \rightarrow \langle ident \rangle_{,1}^{+}
r_{112} : \langle ident \rangle_{,1}^{+} \rightarrow , \langle ident \rangle_{,}^{+}
r_{113}:
r_{114} : \langle param \rangle_{;}^{+} \rightarrow \langle param \rangle \langle param \rangle_{:1}^{+}
r_{115} : < param > ^+_{:1} \rightarrow ; < param > ^+_{:}
r_{117} : \langle expr \rangle_{,}^{+} \longrightarrow \langle expr \rangle_{,1}^{+}
r_{118} : \langle expr \rangle_{,1}^{+} \rightarrow , \langle expr \rangle_{,}^{+}
r_{119}:
                         \rightarrow \land
r_{120} : \langle elsif \rangle^+ \rightarrow elsif \langle expr \rangle  then \langle instr \rangle^+ \langle elsif \rangle^+_1
```

 $r_{121} : \langle elsif \rangle_1^+ \rightarrow \langle elsif \rangle^+$

 $\rightarrow \land$

 r_{122} :