

Variabile	Produzione	Insieme guida
	$P \rightarrow \{P.next = newLabel(); SL.next = P.next\} SL \{emitLabel(P.next)\} EOF$	ID print read case while {
	$SL \rightarrow \{S.next = newLabel()\} S \{SL'.next = SL.next\} SL'$	ID print read case while {
	$SL' \rightarrow ; \{S.next = newLabel()\} S \{SL'_1.next = SL'.next\} SL'_1$;
	$SL' \rightarrow \epsilon$	} EOF
	$S \rightarrow ID := E \{emit(istore, ID)\}$	ID
	$S \rightarrow print(E) \{print()\}$	print
	$S \rightarrow read(ID) \{read(ID)\}$	read
	$S \rightarrow case \{WL.next = newLabel(); WL.end = S.next\} WL \text{ else } \{S_1.next = S.next\} S_1 \{emitLabel(S.next)\}$	case
	$S \rightarrow while(\{B.true = newLabel(); B.false = S.next; S_1.next = newLabel(); emitLabel(S_1.next)\} B) S_1 \{emit(goto, S_1.next); emitLabel(S.next)\}$	while
	$S \rightarrow \{ \{SL.next = S.next\} SL \}$	{
	$WL \rightarrow \{WI.next = newLabel()\} WI \{emit(goto, WL.end); emitLabel(WI.next); WL'.next = WL.next; WL'.end = WL.end\} WL'$	when
	$WL' \rightarrow \{WI.next = newLabel()\} WI \{emit(goto, WL'.end); emitLabel(WI.next); WL'_1.next = WL'.next; WL'_1.end = WL'.end\} WL'_1$	when
	$WL' \rightarrow \epsilon$	else
	$WI \rightarrow when(\{B.true = newLabel(); B.false = WI.next\} B) \{emitLabel(B.true); S.next = WI.next\} S$	when
	$B \rightarrow \{C.true = B.true; C.false = newLabel()\} C \{emitLabel(C.false); B'.true = B.true; B'.false = B.false\} B'$! (NUM ID

$B' \rightarrow \{C.true = B'.true; C.false = newLabel()\} C \{emitLabel(C.false); B_1'.true = B'.true; B_1'.false = B'.false\} B_1'$	$ $
$B' \rightarrow \epsilon \{emit(goto, B'.false)\}$	$)$
$C \rightarrow \{A.true = newLabel(); A.false = C.false\} A \{emitLabel(A.true); C'.true = C.true; C'.false = C.false\} C'$	$! (NUM ID$
$C' \rightarrow \&\& \{A.true = newLabel(); A.false = C'.false\} A \{emitLabel(A.true); C_1'.true = C'.true; C_1'.false = C'.false\} C_1'$	$\&\&$
$C' \rightarrow \epsilon \{emit(goto, C'.true)\}$	$) $
$A \rightarrow ! \{A_1.true = A.false; A_1.false = A.true\} A_1$	$!$
$A \rightarrow (\{B.true = A.true; B.false = A.false\} B)$	$($
$A \rightarrow E RELOP E \{emit(if_icmprel, A.true), emit(goto, A.false)\}$	$(NUM ID$
$E \rightarrow T E'$	$(NUM ID$
$E' \rightarrow + T E' \{emit(iadd)\}$	$+$
$E' \rightarrow - T E' \{emit(isub)\}$	$-$
$E' \rightarrow \epsilon$	$RELOP) ; EOF \}$ when else $\&\& $
$T \rightarrow F T'$	$(NUM ID$
$T' \rightarrow * F T' \{emit(imul)\}$	$*$
$T' \rightarrow / F T' \{emit(idiv)\}$	$/$
$T' \rightarrow \epsilon$	$+ - RELOP) ; EOF \}$ when else $\&\& $

F → (E)	(
F → NUM {emit(l _{dc} ,NUM)}	NUM
F → ID {emit(i _{load} ,ID)}	ID