

Schema di traduzione on-the-fly: Translator

NON TERMINALE	PRODUZIONE
<prog>	→ {prog.next = newlabel(), statlist.next = prog.next} <statlist> {emitlabel(prog.next)} EOF
<statlist>	→ {stat.next = newlabel()} <stat> {statlistp.next = statlist.next} <statlistp>
<statlistp>	→ ; {stat.next = newlabel()} <stat> {statlistp1.next = statlistp.next} <statlistp1>
<statlistp>	→ ϵ
<stat>	→ ID := <expr> {emit(istore,ID)}
<stat>	→ print (<expr>) {print()}
<stat>	→ read (ID) {read(ID)}
<stat>	→ case {whenlist.next = newLabel(),whenlist.end = stat.next()} <whenlist> else {stat1.next = stat.next} <stat1> {emitLabel(stat1.next)}
<stat>	→ while ({bexpr.true = newlabel(), bexpr.false = stat.next, stat1.next = newlabel(), emitLabel(stat1.next)} <bexpr> {emitLabel(bexpr.true)}) <stat1> {emit(goto stat1.next), emitLabel(stat.next)}
<stat>	→ { {statlist.next = stat.next} <statlist> }
<whenlist>	→ {whenitem.next = newLabel()} <whenitem> {emit(goto,whenlist.end), emitLabel(whenitem.next), whenlistp.end = whenlist.end, whenlistp.next = whenlist.next } <whenlistp>
<whenlistp>	→ {whenitem.next = newLabel()} <whenitem> {emit(goto,whenlistp.end), emitLabel(whenitem.next), whenlistp1.end = whenlistp.end, whenlistp1.next = whelistp.next} <whenlistp1>

<whenlistp>	→ ϵ
<whenitem>	→ when ({bexpr.true = newLabel(), bexpr.false = whenitem.next} <bexpr>) {emitLabel(bexpr.true); stat.next = whenitem.next} <stat>
<bexpr>	→ <expr> RELOP <expr> {emit(RELOP,bexpr.true), emit(goto,bexpr.false)}
<expr>	→ <term> <exprp>
<exprp>	→ + <term> {emit(iadd)} <exprp>
<exprp>	→ - <term> {emit(isub)} <exprp>
<exprp>	→ ϵ
<term>	→ <fact> <temp>
<temp>	→ * <fact> {emit(imul)} <temp>
<temp>	→ / <fact> {emit(idiv)} <temp>
<temp>	→ ϵ
<fact>	→ (<expr>)
<fact>	→ NUM {emit(NUM.val)}
<fact>	→ ID {emit(ID.addr)}