

stmts → *stmts stmt*
stmts → ϵ
stmt → **id** = *bool*;
stmt → **for** *id* = *expr* : *expr* : *expr* *stmt*
stmt → **if**(*bool*) *stmt*
stmt → **if**(*bool*) *stmt* **else** *stmt*
stmt → **while**(*bool*) *stmt*
stmt → **do** *stmt* **while**(*bool*);
stmt → **break**;
stmt → *block*
block → {*decls stmts*}
decls → *decls decl*
decls → ϵ
decl → *type* **id**;
type → **float**
type → **int**
join → *equality*
equality → *equality* == *rel*
equality → *equality* != *rel*
equality → *rel*
rel → *expr* < *expr*
rel → *expr* <= *expr*
rel → *expr* > *expr*
rel → *expr* >= *expr*
rel → *expr*
expr → *expr* + *term*{*print*(" + ")}
expr → *expr* - *term*{*print*(" - ")}
expr → *term*
term → *term* * *unary*{*print*(" * ")}
term → *term* / *unary*{*print*(" / ")}
term → *not unary*
unary → -*unary*{*print*("neg")}
term → *unary*
unary → *pow*

pow → *factor*^{*pow*}{*print*("^")}
pow → *factor*
factor → ***id***{*print*(*id.lex*)}
factor → ***num***{*print*(*num.lex*)}
factor → ***true***{*print*(*num.lex*)}
factor → ***false***{*print*(*num.lex*)}
factor → (*expr*)
factor → ***sin***(*expr*) {*print*("sin")}
factor → ***cos***(*expr*) {*print*("cos")}