

Syntax Summary for C-- language

Note: symbols in bold denote literal characters; an item in square braces [] may be present or not.

program:

external-definition [program]

external-definition:

function-definition

data-definition

function-definition:

[type-specifier] identifier ([parameter-list]) compound-statement

parameter-list:

type-specifier identifier[, parameter-list]

type-specifier:

int

data-definition:

type-specifier declarator-list ;

declarator-list:

identifier [, declarator-list]

compound-statement:

{ [declaration-list] [statement-list] }

declaration-list:

data-definition [declaration-list]

statement-list:

statement [statement-list]

statement:

compound-statement

expression ;

if (expression) statement [**else** statement]

while (expression) statement

do statement **while** (expression) ;

continue;

break;

return [expression] ;

;

expression:

- identifier
- integer
- (expression)
- expression
- ! expression
- expression binop expression
- lvalue assignop expression
- identifier ([expression-list])

expression-list:

- expression[, expression-list]
- string[, expression-list]

binop:

- * /
- + -
- < > <= >=
- == !=
- && ||

lvalue:

- identifier

assign-op:

- =

integer:

- string of any number of digits

string:

- string of any number of characters in " "

identifier:

- letter or _ optionally followed by any number of alphanumerics or _

whitespace:

- blank, tab, newline, or comment

comment:

- /* anything */
- // anything

Reserved keywords:

auto, break, case, char, continue, default, do, double, else, enum, extern, float, for, goto, if, int, long, register, return, short, sizeof, static, struct, switch, typedef, union, unsigned, while