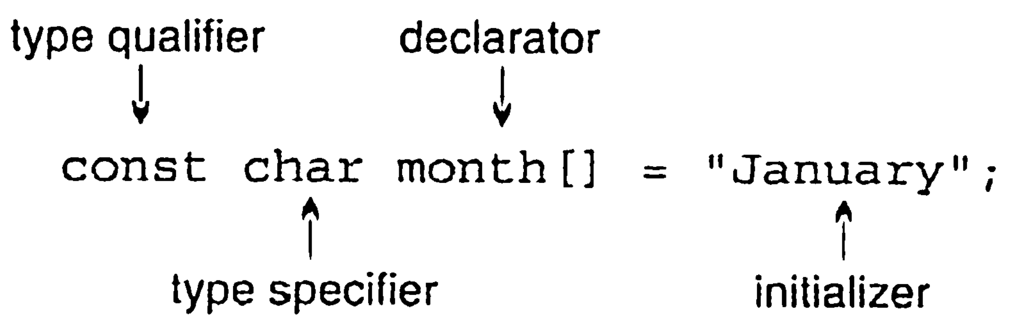
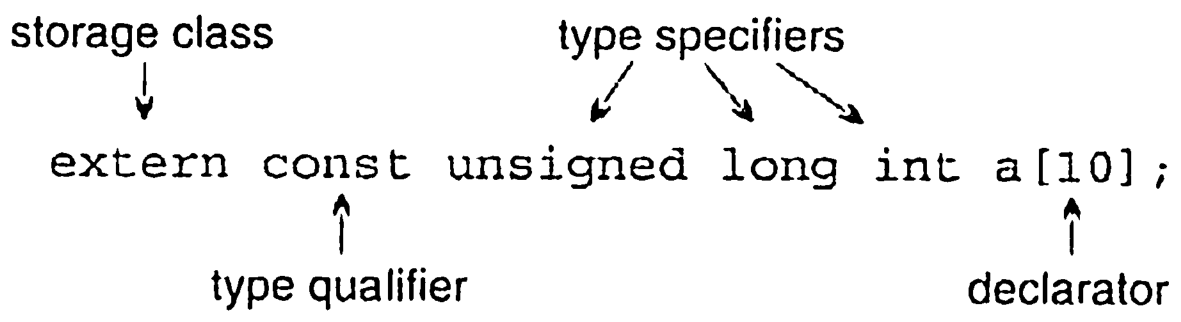
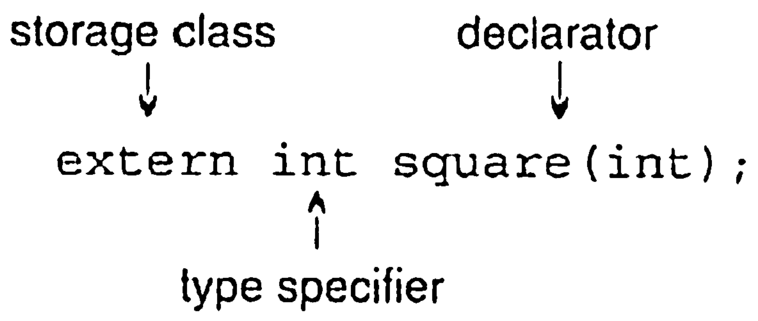


The following declaration has both a storage class and a type qualifier. It also has three type specifiers; their order isn't important:



Function declarations, like variable declarations, may have a storage class, type qualifiers, and type specifiers. The following declaration has a storage class and a type specifier:



The next four sections cover storage classes, type qualifiers, declarators, and initializers in detail.

18.2 Storage Classes

Storage classes can be specified for variables and—to a lesser extent—functions and parameters. We'll concentrate on variables for now.

Recall from Section 10.3 that the term *block* refers to the body of a function (the part enclosed in braces) or a compound statement, possibly containing declarations. In C99, selection statements (`if` and `switch`) and iteration statements (`while`, `do`, and `for`)—along with the "inner" statements that they control—are considered to be blocks as well, although this is primarily a technicality.

Properties of Variables

Every variable in a C program has three properties:

- ***Storage duration.*** The storage duration of a variable determines when memory is set aside for the variable and when that memory is released. Storage for a variable with ***automatic storage duration*** is allocated when the surrounding