7 Basic Types

unsigned types K&R C provides only one unsigned type (unsigned int).

signed K&R C doesn't support the signed type specifier.

number suffixes

K&R C doesn't support the U (or u) suffix to specify that an integer constant is unsigned, nor does it support the F (or f) suffix to indicate that a floating constant is to be stored as a float value instead of a double value. In K&R C, the L (or 1) suffix can't be used with floating constants.

long float K&R C allows the use of long float as a synonym for double; this usage isn't legal in C89.

long double K&R C doesn't support the long double type.

escape sequences The escape sequences \a. \v. and \? don't exist in K&R C. Also, K&R C doesn't support hexadecimal escape sequences.

size_t In K&R C, the sizeof operator returns a value of type int: in C89, it returns a value of type size_t.

usual arithmetic conversions

K&R C requires that float operands be converted to double. Also, K&R C specifies that combining a shorter unsigned integer with a longer signed integer always produces an unsigned result.

9 Functions

function definitions

In a C89 function definition, the types of the parameters are included in the parameter list:

```
double square(double x)
{
  return x * x;
}
```

K&R C requires that the types of parameters be specified in separate lists:

```
double square(x)
double x;
{
  return x * x;
}
```

function declarations

A C89 function declaration (prototype) specifies the types of the function's parameters (and the names as well, if desired):

```
double square(double x);
double square(double);  /* alternate form */
int rand(void);  /* no parameters */
```