

Statements Tell the Computer What to Do

In **C**, a statement specifies a complete operation.

In other words, **a statement tells the computer to do something**.

There are **three types of statements**.

But statements can consist of other statements,

which can consist of other statements,
and so forth.

Many Statements are Quite Simple

Here are two of the three types...

```

;          /* a null statement */

/* A simple statement is often an
   expression and a semicolon. */
A = B; /* simple statements */
printf ("Hello, ECE220!\n");

```

These two types **end with a semicolon (;)**.

Compound Statements Consist of Other Statements

Third type: a **compound statement** consists of

- a **sequence of statements**
- **between braces**.

```

{ /* a compound statement */
  radius = 42;
  C = 2 * 3.1416 * radius;
  printf ("C = %f\n", C);
}

```

A compound statement may also contain variable declarations for use inside the statement.

A Program is a Sequence of Statements

The function body of **main** is a compound statement.

When program is **started** (or **runs**, or **executes**),

- **the computer executes the statements in main**
- **in the order that they appear in the program.**

