

University of Illinois at Urbana-Champaign
Dept. of Electrical and Computer Engineering

ECE 220: Computer Systems & Programming

Control Constructs in C (Partially a Review)

Learn Four More Kinds of C Statements

We'll learn about statements for* ...

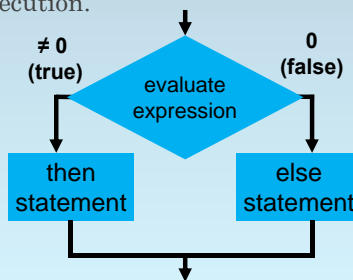
- conditional decomposition:
if and **switch**;
- iterative decomposition:
for, **while**, and **do/while**;
- iteration control:
continue, and **break**; and
- function control:
return.

*Minor review: **if** and **for** covered in ECE120.

Statements Can Introduce Conditions

Simple statements in **C** can introduce **conditional** execution.

Based on an expression, the computer executes one of two statements.



C's **if** Statement Enables Conditional Execution

Conditional execution uses the **if statement**:

```

if ( <expression> ) {
    /* <expression> != 0:
       execute "then" block */
} else {
    /* <expression> == 0:
       execute "else" block */
}
  
```

<expression> can be replaced with any expression, and “**else { ... }**” can be omitted.