

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

ECE 220: Computer Systems & Programming

C Functions and Examples

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Signature Include Name and Types for Inputs and Outputs

Let's talk about how functions are used in **C**.

A function's **signature*** defines the function's

- **name**,
- **number and type of parameters**, and
- **type of value returned**.

*Sometimes called a function's interface.

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Function Signature Needed to Call Function

A function's signature is **needed to** call the function:

- compiler can **check number of arguments** (for each parameter, caller must pass an **argument**)
- compiler can **convert to correct types** (or refuse to do so)

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Declare a Function to Use It, But Define It Somewhere

Function **declarations** include

- **just a signature** (followed by semicolon)
- parameter names strongly encouraged
- **used to generate calls**

Function **definitions** include

- **signature followed by code** (a compound statement)
- parameter names required
- **used to generate code for function** (also suffices to generate calls)

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