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

ECE 220: Computer Systems & Programming

Programming with Functions

Stop Decomposing at the Level of C Functions

You have seen several **C** functions.

As you gain more experience,
◦ when you break down tasks,
◦ **stop when a subproblem**
◦ **can be implemented with a function**,
◦ including an API call* to a library.

*API stands for Application Programming Interface,
the functions that a library provides.

Let's Print Prime Numbers as an Example

Let's solve this task with such an approach:

Print all prime numbers less than 1000.

In **MP5**, you will develop
◦ a body of drawing subroutines
◦ that build on
◦ setting pen color and
◦ drawing a dot.

Let's Decompose the Problem

Let's start with a **for** loop.