Administrivia

- Homework 2 on Web. Due next week.

Slide 1

Sidebar — Compiler Options

- Earlier I showed the simplest way to use `gcc` to compile a program. But there are many variations — *options*. Specify on the command line, ahead of name of input file.

- Some of the most useful:

  - `-Wall` and `-pedantic` warn you about dangerous and non-standard things.

  - `-std=c99` allows you to use full C99.

  - `-o` allows you to name the output file (default `a.out`).

  (The right way to use all of these — makefiles, next time.)

Slide 2

Examples

Slide 3

- First let's write a program to calculate the roots of a quadratic equation, using the quadratic formula. (We'll hard-code input values for now — a discussion of getting input should wait until after we talk about pointers.)

Arrays in C, Briefly

Slide 4

- Syntax for creating arrays is somewhat different from Java's — no explicit `new`, but instead something like

    ```
    int x[10];
    ```

    to reserve space for 10 `int`s. In old-style C, sizes must be constants known at compile time. In new-style C, "variable-length arrays" (VLAs) are permitted as well.

- Syntax for array access is the same as Java, but there's no `length` variable, and no checks are made to ensure that the index is legit (between 0 and array size minus one). This can make for interesting bugs . . .

- Syntax for passing arrays as parameters to functions is somewhat like Java's, except brackets typically go after the parameter name, and and arrays and pointers (more soon) can be used more or less interchangeably.

- (Examples as time permits.)

Minute Essay

- None — sign in.

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