

Slide 1

Administrivia

- Homework 6 on Web; due in a week.
- Quiz 5 will be next Thursday (not Tuesday).
- (Review minute essay from last time.)
- (Review examples from last time.)

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Arrays in C — Recap

- Basic idea is to provide something analogous to subscripted variables in math.
- Declarations look like other variable declarations, except name is followed by $[n]$, where n is the number of elements.
- Reference individual elements with variable name followed by equivalent of subscript in math — $[i]$, where i is an index *ranging from 0 to $n - 1$* . No checks in C to make sure the index is really in that range!

Arrays in C, Continued

- Declaring that a function parameter is an array — put brackets after parameter, usually don't specify array size as part of array parameter.

Example:

```
double array_sum(int size, double nums[]);
```

(The newer C99 standard supports a slightly different syntax. More about this another time.)

- Passing an array to a function — just give its name. Example:

```
double stuff[100];  
printf("%f\n", array_sum(100, stuff));
```

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Arrays in C, Continued

- Using an array parameter within the function — as in previous examples.
- A difference between array parameters and other parameters — array elements can be changed.
- If your function isn't supposed to change the array, declare the parameter `const`, e.g.

```
double array_sum(int size, const double  
nums[]);
```

(Helps people using your function understand its effects, allows compiler to enforce that no changes are made.)

- (Example(s) ...)

Slide 4

Minute Essay

- None — sign in.

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