Midterm Topics
CSE 333 16au

There is nothing about C++ on the midterm.

- Scope and Lifetime
  - Global vs. local
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- Type checking
- Pointers
  - call by value vs. call by reference
  - return by value
- Arrays
  - C strings
- The preprocessor
  - #include, #define, #ifndef
  - The purpose of .h files
    - .h files vs. libraries
- Linking
- Portability of code
  - C standard library
    - basic string functions (strcpy, strcmp)
- Memory management
  - static data; heap data; stack data; text
  - malloc/free
  - basic use of valgrind
- Function pointers
- Generics in C
  - callbacks
- structs
- Files
  - buffered vs. unbuffered I/O
    - performance implications
  - purpose of open
  - unlink
    - links (man ln)
- Processes
  - Creation (fork, exec)
  - Inter-process communication
    - argv, files, named pipes, anonymous pipes, signals, shared memory
- jansson / gtk+ reference counting
- Projects 1-3