CSE 333 – Section 10
Final Review

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C
- pointer
- array
- type checking
- separate compilation
- header files, preprocessing
- linking
- C-string convention
C doesn’t have:

- classes
- exceptions
- call-by-reference
- real support for generics
- real polymorphism
- garbage collection
C++

- superset of C
- make up things missing in C except garbage collection
- things that differ from Java:
  - user-managed memory
  - heap and stack allocated objects
  - compile time type-checking only
Things you should know

- copy/move constructors, assignment operator
- implicit conversions can take place
- STL library: data structures/algorithms
- how to define a class, create/destroy objects
- create/use C++ template
- constructor/destructor operations
- callbacks and function objects
- operator overloading
- references vs. pointers
Additionally you should know

- what is memory leak
- how to use valgrind
- how to write simple programs in C/C++, on the final
- basic information about network sockets (TCP only)
- what is a thread