C201/I211

By:

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Major Topics of C201/I210

Major list of topics to be covered:

a. Structs
b. Bitwise operators {and the internal representation of data}
c. More on pointers
d. Multidimensional arrays
e. Dynamically allocated arrays: new and delete operators
f. Register storage class, How memory is allocated for a C/C++ program.
g. Linked lists
h. C style I/O, scanf and printf
i. More standard library functions, qsort, bsearch, clock, memmove, etc.
j. Inline functions
k. Function overloading
l. Function templates
m. More on parameter passing: const parameters, default parameters.

n. Command line parameters.
o. Typedef
p. Conditional compilation
q. Separate compilation
r. Files (ifstream, ofstream, fstream)
s. Major library classes (string, etc.)
t. Classes

• member functions
• templates
• implementing abstract data types
• dynamic classes
• constructors and destructors
• inheritance, overriding, operator overloading, friend class and functions, reference type vs. value type
• polymorphism, virtual functions