

Unit Testing

Unit testing is...

- Always...
 - Testing the smallest feasible chunk of code
 - Dynamic testing
 - Great for allowing change to the units
 - Part of every one of your homework assignments from here on out!
- Sometimes...
 - Black box testing
 - White box testing
 - Part of a larger test process
 - Automated
 - Manual
- Rarely ever...
 - An exhaustive test of the function
 - An exhaustive test of the system
- Comes before...
 - Integration Testing
 - System Testing
 - System Integration Testing
- Sometimes comes before...
 - Writing code!
- A critical piece of...
 - Xtreme programming

More C

- Enumerated Types
 - Are great for when you have a limited number of value for a variable
 - Help avoid accidental usage of vague constants
 - Greatly improve readability of code
 - Used a lot in C and other languages (in these languages you even get type checking)
 - Can have default values
- Struct(ure)s
 - Allow grouping of data into logical chunks
 - Are not objects (yet)
 - Typically do not have methods
 - Begin uninitialized
 - Are great for returning multiple values
 - Defined in header file
- Assert
 - Prints an error if it is passed a false value
 - Much easier than physically verifying output when testing
 - Also allows you to put pseudo-preconditions in your code.
 - Must include assert.h for it to work