CSCI 480 C++ Notes

Get to the instructor’s turing account:

Cd ~t90rkf1

Cd d480

I/O code in directory: dio

Main section is what we are doing now.

Record level io:

File-iss2.cpp (iss = istringstream)

Need #include sstream for any istringstream

.h or heard files are used for old school c files or code that you develop

**No .h in C++**

C-string is an array of characters – do not use unless talking to a program that insists on it.

Ways to read in records:

1. While (true) – break : not really good except to use in a read loop
2. “Loop + ½ method” : priming

read the first record

while (!eof)

process

read -> then the program will loop back to the top.

This option is also not the greatest. ☹

1. do-while also works, but professor doesn’t like it

**getline() does not raise eof signal**

istringstream topic:

**istringstream iss;**

istringstream is a class, .str() builds a istringstream and you must use .clear() before moving new data in.

>> extraction operator

while (iss >> newtoken)

Directory: dapi

Carg3.cpp

To get address of a string:

(void\*) -> this tells cout to not guess and will dereference a pointer to print it’s address. (this forces cout to print a hex address essentially

Ex: cout << (void\*)argv[0] << endl;

C++ has strong typing: a pointer to int and a pointer to float are not similar.

Review regular expressions

Dual Mode Operation:

Dual mode protects OS by keeping user programs from running protected system devices.

Two modes:

User mode

Kernal mode = monitor mode = system mode = supervisor mode

Mode bit:

-Provided by hardware

-provides ability to distinguish when system is running user code or kernel code

-some instructions designated as privileged, only executable in kernel mode.

User = 1

Kernel = 0

When an interrupt/system call occurs, hardware switches to kernel mode

MS-DOS (based on intel 8088) did not have dual mode, so a program could wipe out the OS.