CSCE 121 Slide Set 1

What is programming?

Slide 2

Where is programming used?

Slide 3-7

Why is C++ good for teaching? Where is C++ used?

Slide 8, 9

Who was Ada Lovelace? Who was Alan Turing? Who is Donald Knuth and what did he do?

Slide 12, 13, 14

What is compilation? Describe the compilation process. What is memory? Describe the structure of the memory when coding? What do the stack and heap do (in regards to the previous question)?

Slide 20, 21, 17, 18, 19

What is an object? What is a variable? What is a declaration? What is a definition? What is a value? What are the rules for naming variables?

Slide 23, 24

What are identifiers and what are they associated with? What does it mean to dereference a variable?

Slide 25

What does it mean to declare, define and initialize a variable? What are the differences between those terms? Give an example.

Slide 26, 27

Do a memory diagram for the code on slide 29

Slide 29 – 47

What is a Byte? How long is a byte? What does memory and memory address have to do with bytes? What kind of addresses do we learn in class? What are the addresses in modern (2000’s and up) computers?

Slide 51

How do you turn bytes into numbers?

Slide 54, 55

What are the 2 methods to turn numbers into binary?

Slide 56, 57

What are the other common number representations? How do you make a negative number in binary? What is Two’s Complement and how does it work?

Slide 58, 59, 60, 61, 62, 63

What is the benefit to using Two’s complement versus just changing the leftmost digit?

Slide 64

What is an unsigned integer? What is the benefit and drawback of an unsigned data type?

Slide 65