

CS120 - Computer Science I

Homework Assignment #1

Spring 2014

Due: Monday February 3, 11:30am

The purpose of this assignment is to create and execute a C++ program that does some fairly simple calculations.

Geologists have found that the average temperature of the ground increases with depth, due to the earth's molten core. The average temperature of the ground at the surface is approximately 20° Celsius, and it increases at the rate of approximately 10° C per kilometer of depth.

For this assignment, you are to write a program that prompts the user for a value of depth in feet, and outputs the depth in kilometers and the expected temperature in both Celsius and Fahrenheit. The format of the output is up to you, but make it look nice. Please name your file `coretemp.cpp`

Once you have verified that program works correctly, use the `script` command to create an output that shows your source code (for example, the script might show the output of `cat coretemp.cpp`), evidence of proper compilation (ie, the `g++` command), and several different executions at depths 1000, 29029, and 10428000 feet.

Turn this assignment in by paper copy printout at the start of class.