Simulation 1 is just a straight forward barebones setup to show basic functionality of the program. Perioidic measurements have been set to every 100ms and the temperatures are set to be taken for 10sec. Additionally, output to both a .csv and .txt has been selected. These selections may be seen in the Simulation 1 Setup text file, which is a copy of the terminal during setup.

In the Simulation 1 Terminal text file, it is shown that while the data collection is running, I am able select using the terminal to view the output by choosing option 4 on the menu. Then, after the text has ran for some time, I press enter on the keyboard, returning to the menu. Finally, the program displays a “Data Collection Complete!” message to show successful completion.

data.csv and data.txt show the temperatures collected during the simulation. As can be seen, the timestamps are very consistant and demonstrate the program performed as expected.

NOTE: The ability to set a temperature to be notified has not been implemented. I discuss this in my report. Also, the ability to specify the units is not implemented. Instead, all three unit types are always calculated (Celsius, Fehrenheit, Kelvin).