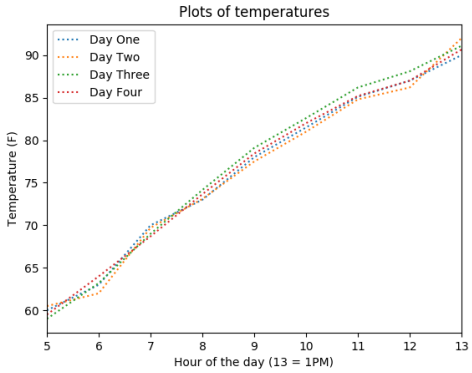
Project 3 Report

CMSC 409 - Artificial Intelligence

Steven Hernandez

1. There would be two input and one output for our unit. Inputs would be the hour and a bias input while output would be the estimated temperature at that hour of the day. In fact, because we have weights for x (hour of the day) and a bias, we can create the formula net = ax+b which means our unit can simply return net * 1 or the identity.
2. The activation function would be some linear function. Or unit would not have a threshold however. Whatever the outcome from the linear activation function is would be the exact result from the learning unit. If we look at the graph of temperatures for our training (and testing) data, we can see that the values are basically just a linear function.



3. Outcome of training with days 1-3