Project Report

Thatcher Rickertsen
Comp 3500
tor0002

Linux Environment Setup:

Overall, this was possibly the most painful setup experience that I have ever had creating a Linux environment. I chose to install CentOS on a VirtualBox system. I had a lot of problems with running basic commands that should have worked normally, such as the process to install the GNOME Desktop. My system was unable to find the proper packages despite me following several step by step tutorials provided for the class as well as tutorials I found online. This pattern continued for pretty much this entire project. However, ultimately I was able to get everything working properly. This made the actual coding and similar steps extremely easy in comparison.

Getting to Know My System

This was extremely easy in comparison to all of the other steps to actually perform. However, it gave a great deal of insight into how many resources I am giving up in order to run the machine on VirtualBox. In particular, one command allowed me to know that I was only running the entire machine on one core of my processor, which I had forgotten to change when I initially set it up on VirtualBox. It allowed me to fix that and hopefully speed it up overall.

Source Code

```c
/* A simple C project */

/* author   tor0002
 * name     Thatcher Rickertsen
 * email    tor0002@auburn.edu
 * date     08/31/2018
 * Processes an array of 10 numbers and returns the average of their squares. */

#include <stdio.h>
#include <math.h>

double avgOfSqrts(double[]);

int main() {
    double sampleArray[10] = {10, 9, 8, 7, 6, 6, 7, 8, 9, 10};
    printf("%lf", avgOfSqrts(sampleArray));
    return 0;
}

double avgOfSqrts(double arrayIn[10]) {
    double sum = 0;
    int i;
    for (i = 0; i < 10; i++) {
        double cur = arrayIn[i];
        double sqrtResult = sqrt(cur);
        sum += sqrtResult;
    }
    return sum/10;
}

```