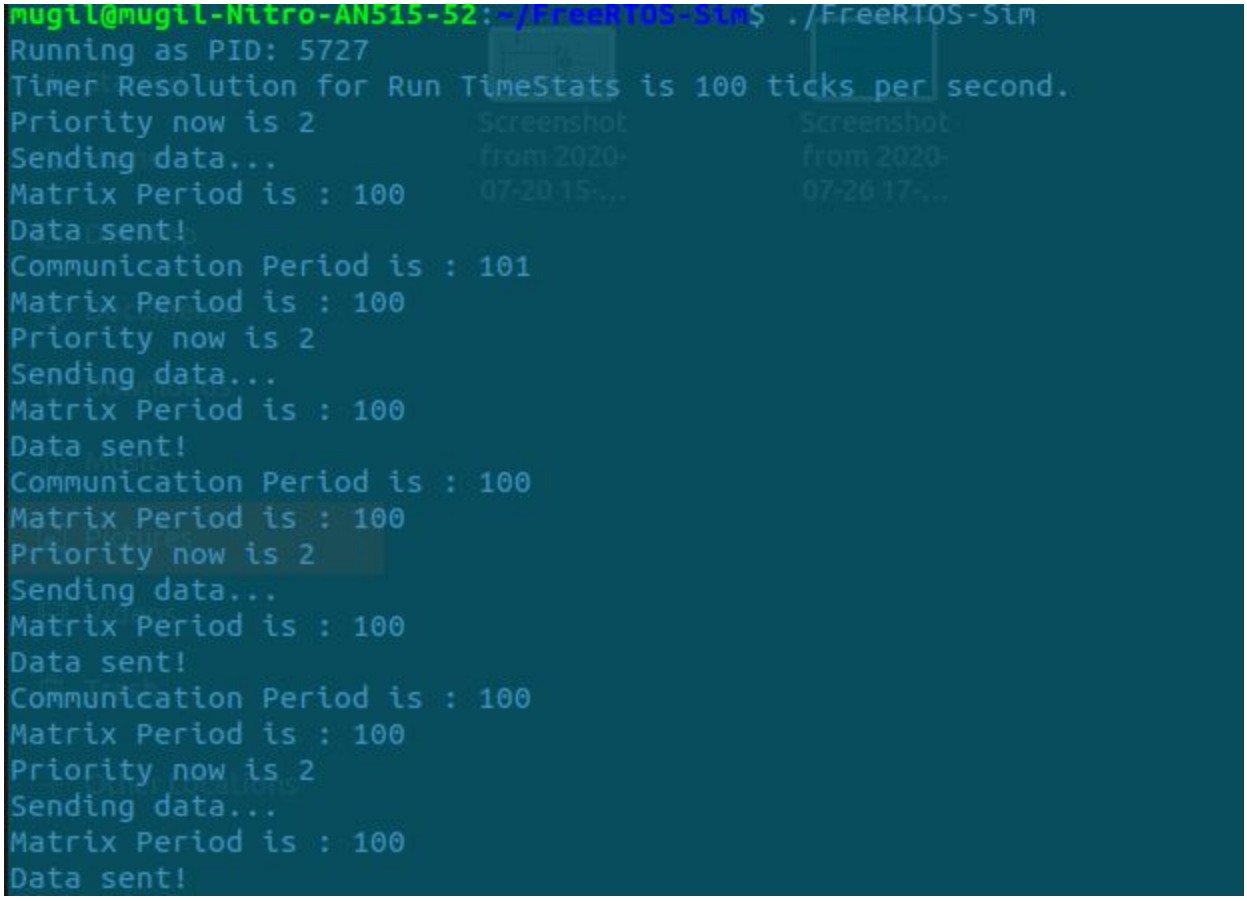
Development of Real-Time system

Assignment 2:



1.Why is "matrixtask" using most of the CPU utilization?

Because it originally has a higher priority and has a much longer running time than the matrix task.

2. Why must the priority of "communicationtask" increase in order for it to work properly?

When the priority of the comm task is lower than the matric task, the matrix hogs the CPU because it has a higher priority and a longer running time.

3. What happens to the completion time of "matrixtask" when the priority of "communicationtask" is increased?

Well, I would have suspected the answer to this question to be, "It goes up" but that's not what I observe. Instead, it stays about the same. I suppose because the comm task has such a short running time that even though the matrix task has lower priority it still gets enough CPU to keep it's running time about the same. Counterintuitive.

4. How many seconds is the period of "matrixtask"? (Hint: look at vApplicationTickHook() to measure it?

Right around 2050 ticks.