

Assignment 2

Screen Shot

```
Matrix Count is -- 0
Count is -- 0
Priority now is 2
Sending data...
increasing priority of the communication task to 2
Matrix Count is -- 0
Data sent!
increasing priority of the communication task to 2
Matrix Count is -- 0
Count is -- 0
Priority now is 2
Sending data...
increasing priority of the communication task to 2
Matrix Count is -- 0
Data sent!
increasing priority of the communication task to 2
Matrix Count is -- 0
Count is -- 0
Priority now is 2
Sending data...
increasing priority of the communication task to 2
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Data sent!
increasing priority of the communication task to 2
Matrix Count is -- 0
Count is -- 0
Priority now is 2
Sending data...
increasing priority of the communication task to 2
Matrix Count is -- 0
Data sent!
increasing priority of the communication task to 2
Matrix Count is -- 0
Count is -- 0
Priority now is 2
Sending data...
increasing priority of the communication task to 2
Matrix Count is -- 0
increasing priority of the communication task to 2
Data sent!
Matrix Count is -- 0
Count is -- 0
Priority now is 2
Sending data...
```

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

Because of the high execution time because of the delays and it's the highest priority

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

Because the matrixtask have a higher priority so communication task can't preempt it so we need to increase the priority of the communicationtask in order to preempt the matrixtask

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

It increases because it's interrupted by the communicationtask so there is a context switch overhead increased

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

It takes about 1 second