Assignment 2 – assigning priorities

# Output

Text

Description automatically generated

Matrix task has a period of about 900mS. Communication task has a period of about 1100mS, because matrix has all the priority until 1000mS have run and communication task takes the priority.

# Questions

* Why is "matrixtask" using most of the CPU utilization?

Matrix has a higher priority, taking most CPU utilization.

* Why must the priority of "communicationtask" increase in order for it to work properly

Communication task priority has to change to 4 to have a higher priority tan matrix task (currently 3). This change to a higher priority allows execution of communication task.

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

Completiion time of matrix task increases

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

It takes about 900mS for the period of matrix task

# Code modifications

I defined these global variables

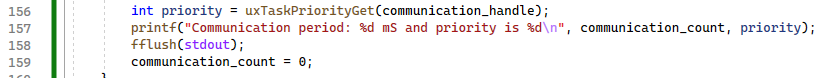
Text

Description automatically generated with medium confidence

Matrix task has a modification to show the current period and to restart



Also communication task



This is the prioritysettask()

Graphical user interface, text, application

Description automatically generated

Main code

Text

Description automatically generated

And vApplicationTickHook()

Text

Description automatically generated