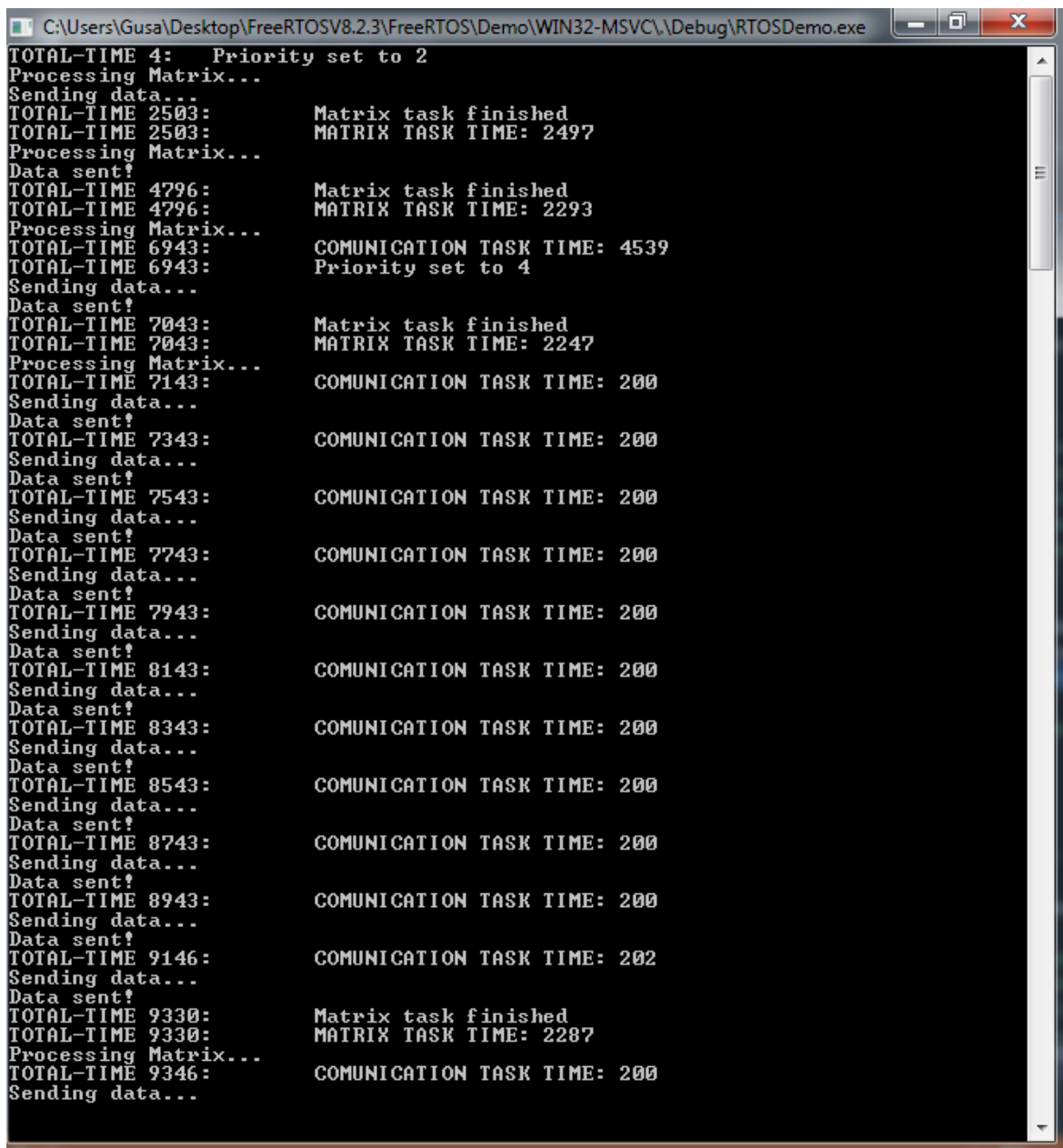


ASSIGNMENT 2 – REPORT

- **Why is "matrixtask" using most of the CPU utilization?**
Because it has more operation than the others. It makes heavy calculus.
- **Why must the priority of "communicationtask" increase in order for it to work properly.**
Because in other way it is interrupted by matrix that has bigger priority.
- **What happens to the completion time of "matrixtask" when the priority of "communicationtask" is increased?**
It is more or less the same. The main thing is that this task doesn't interrupt the communication task.
- **How many seconds is the period of "matrixtask"? (Hint: look at vApplicationTickHook() to measure it)**
Matrix task period is more or less 2287 ms



```
C:\Users\Gusa\Desktop\FreeRTOSV8.2.3\FreeRTOS\Demo\WIN32-MSVC\Debug\RTOSDemo.exe
TOTAL-TIME 4: Priority set to 2
Processing Matrix...
Sending data...
TOTAL-TIME 2503: Matrix task finished
TOTAL-TIME 2503: MATRIX TASK TIME: 2497
Processing Matrix...
Data sent!
TOTAL-TIME 4796: Matrix task finished
TOTAL-TIME 4796: MATRIX TASK TIME: 2293
Processing Matrix...
TOTAL-TIME 6943: COMMUNICATION TASK TIME: 4539
TOTAL-TIME 6943: Priority set to 4
Sending data...
Data sent!
TOTAL-TIME 7043: Matrix task finished
TOTAL-TIME 7043: MATRIX TASK TIME: 2247
Processing Matrix...
TOTAL-TIME 7143: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 7343: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 7543: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 7743: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 7943: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 8143: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 8343: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 8543: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 8743: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 8943: COMMUNICATION TASK TIME: 200
Sending data...
Data sent!
TOTAL-TIME 9146: COMMUNICATION TASK TIME: 202
Sending data...
Data sent!
TOTAL-TIME 9330: Matrix task finished
TOTAL-TIME 9330: MATRIX TASK TIME: 2287
Processing Matrix...
TOTAL-TIME 9346: COMMUNICATION TASK TIME: 200
Sending data...
```