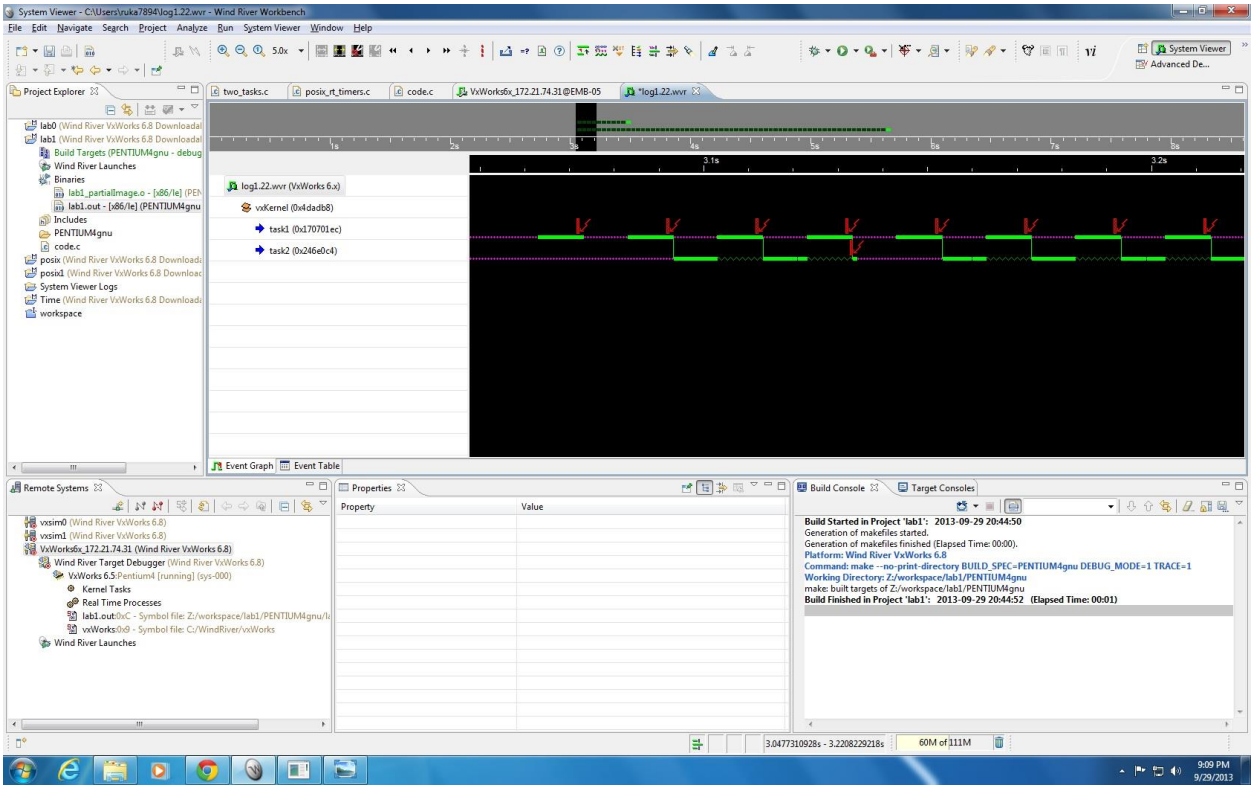
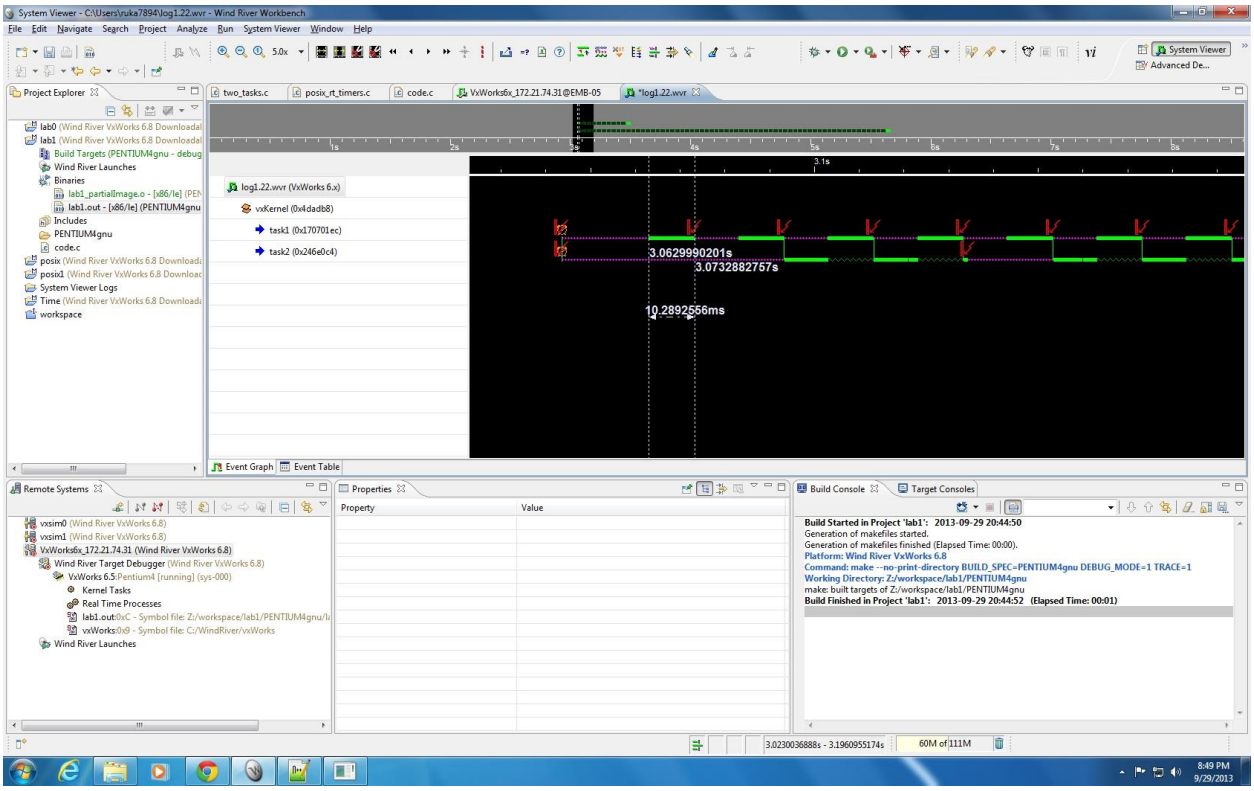
Q1).


System Viewer - C:\Users\ruka7894\log1.22.wvr - Wind River Workbench
File Edit Navigate Search Project Analyze Run System Viewer Window Help
Project Explorer
two_tasks.c
posix_rt_timers.c
code.c
VxWorks6x_172.21.74.31@EMB-05
*log1.22.wvr
log1.22.wvr (VxWorks 6.x)
vxKernel (0x4dadb8)
task1 (0x170701ec)
task2 (0x246e0c4)
Event Graph
Event Table
Remote Systems
Properties
Property
Value
Build Console
Target Consoles
Build Started in Project 'lab1': 2013-09-29 20:44:50
Generation of makefiles started.
Generation of makefiles finished (Elapsed Time: 00:00).
Platform: Wind River VxWorks 6.8
Command: make --no-print-directory BUILD_SPEC=PENTIUM4gnu DEBUG_MODE=1 TRACE=1
Working Directory: Z:/workspace/lab1/PENTIUM4gnu
make: built targets of Z:/workspace/lab1/PENTIUM4gnu
Build Finished in Project 'lab1': 2013-09-29 20:44:52 (Elapsed Time: 00:01)
60M of 111M
9:09 PM
9/29/2013

Q3).

Terms needed for 10ms computational time: 2498162

Terms needed for 20ms computational time: 4898459

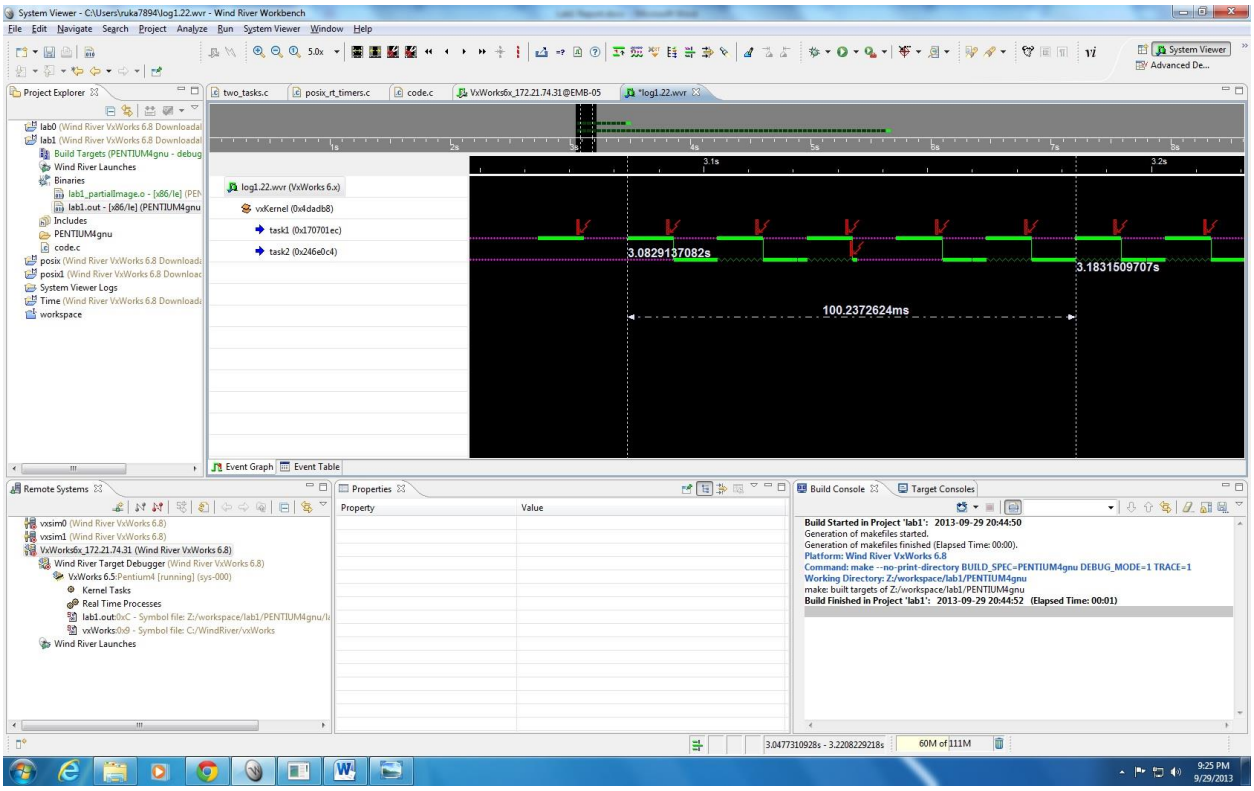


Q4).

Yes, the system is feasible. According to the Lehockzy Shah and Ding theorem, this task set is feasible if it shown to be feasible with RM policy over the LCM of the two periods (20ms and 50ms; LCM = 100ms). According to the system viewer plot, the system was shown to be feasible over a time of 100ms.

Q5).

The following screenshot shows that the system is feasible:



LAB 1 Sign Off Sheet ECEN 4/5623

Name: Rutvij Kaokhani's 4623 / 5623 (Circle One)

Question 1:

a) Student's understanding of POSIX Timers

[ ] Average [ ] Good [ ] Excellent

b) Student's demonstration of POSIX timer with at least 10ms resolution.

[ ] Average [ ] Good [ ] Excellent

c) Student's demo of System View Trace

[ ] Average [ ] Good [ ] Excellent

Question 2:

a) Fibonacci Code Functioning

[ ] Average [ ] Good [ ] Excellent

Question 3:

a) Fibonacci Sequence for 10 ms _____ at Target _____

b) Fibonacci Sequence for 20 ms _____ at Target _____

} Not shown. (No screenshot)

Question 4:

a) Task Implementation for 10ms and 20ms using Lehockzy, Shah, and Ding Theorem
[ ] Average [ ] Good [ ] Excellent

Question5:

a) Demonstration of the above question through system viewer.
[ ] Average [ ] Good [ ] Excellent

Comments: Did not understand the flow from when the timer expires to the signal handler call.

Signature:- [signature]

Date:- 09/29/2013

→ System viewer trace not shown.

→ Student was partially correct ~~with~~ with the explanation of ~~spectrum~~ schedulability for the two tasks

→ Correct trace shown after 90 minutes on the second attempt.

[signature]