BIll Liu

Simulation Assignment

1) After modifying the scheduler to use RM First Fit policy, the resulting scheduled simulation for task set T1(2,1) T2(2.5,0.1) T3(3,1) T4(4,1) T5(4.5,0.1) T6(5,1) T7(6,1) T8(7,1) T9(8,1) T10(8.5,0.1) T11(9,1) are shown below.

from 0.00 to 100.00 ms			
	Total load	Payload	System load
CPU 1	0.7450	0.7450	0.0000
CPU 2	0.7400	0.7400	0.0000
CPU 3	0.4500	0.4500	0.0000
Average	0.6450	0.6450	0.0000

Response time:			
Task	min	avg	max	std dev
Task 1	1.000	1.000	1.000	0.000
Task 2	0.100	0.475	1.100	0.415
Task 3	1.000	1.000	1.000	0.000
TASK T4	1.000	1.360	2.000	0.480
TASK T5	0.100	0.543	1.200	0.432
TASK T6	1.000	1.000	1.000	0.000
TASK T7	2.000	3.171	3.300	0.297
TASK T8	1.000	1.800	3.000	0.833
TASK T9	1.000	1.231	2.000	0.421
TASK T10	0.100	1.250	3.400	1.085
TASK T11	1.000	1.500	3.000	0.645

2) The source code of the scheduling algorithm can be seen in P_RM_FIRSTFIT.py

Programming Assignment

See main.c for code and below for a screenshot of the program during execution.