

Healthcare System

Healthcare system is safety critical application has **6 tasks**.

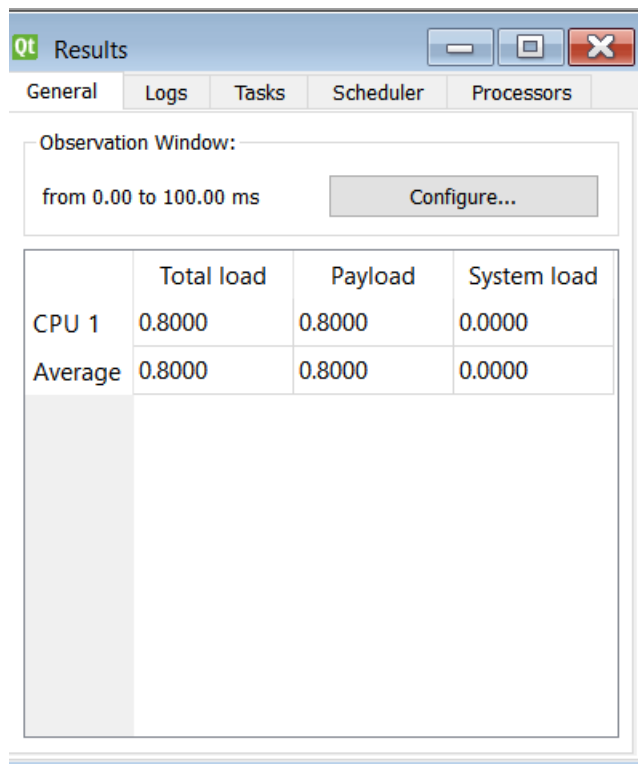
System is rate **monotonic**.

TASK	PRIORITY	PERIODICITY	DEADLINE
T1	3	10	10
T2	1	100	100
T3	3	10	10
T4	3	10	10
T5	2	50	50
T6	3	10	10

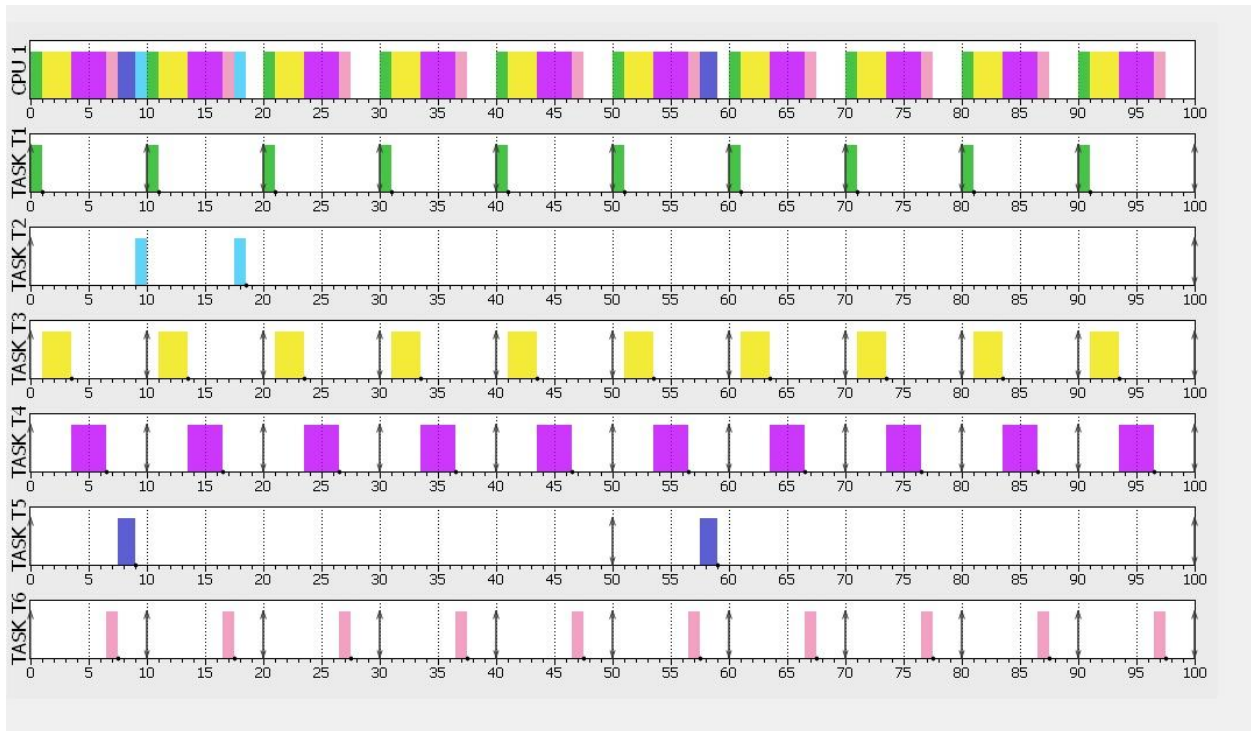
System tick > total execution time = **10ms**

Hyper period **100**

CPU load $((1*10) + 2 + (2.5*10) + (3*10) + (1.5*2) + (1*10))/100 = \mathbf{80\%}$



Gantt chart



Manual chart



Comment:

1.system is schedulable. (no task misses deadline)

2.not loaded. (80%)

3.system is safety critical application so it very high response to take quick action.