

1) Given the following task list:

{T1(4,1),T2(7,2),T3(10,2)} T(p,e) p : period e : execution time

Apply the Rate Monotonic scheduling algorithm until t=20 (Single core CPU)

- Fill the following table:

Time (t)	1	2	3	4	5	6	7	8	9	10
Executing task	T1	T2	T2	T3	T1	T3	--	T2	T1	T2
Time (t)	11	12	13	14	15	16	17	18	19	20
Executing task	T 3	T 3	T1	--	T2	T2	T1	--	--	--

- What does a preemptive scheduler mean?
- Is RM preemptive? Yes
- At which points of time (t) and which tasks are preempted considering the table?
  - t=5 T3 preempted, t=9 T2 preempted

2) Given tasks T1(5,4) and T2(2,1) and RM scheduler.

- Are these tasks schedulable with RM? No
- At which first point of time (t) do you see a problem? And what is the problem?
  - At t=6 the new period of T1 starts but the previous period of T1 has not been yet finished!

3) Given the following periodic task list:

{T1(3,1),T2(5,2)}

Apply the EDF scheduling algorithm until t=20 (Single core CPU) and fill the table

Time (t)	1	2	3	4	5	6	7	8	9	10
Executing task	T1	T2	T2	T1	--	T2	T1	T2	--	T1
Time (t)	11	12	13	14	15	16	17	18	19	20
Executing task	T2	T2	T1	--	--	T1	T2	T2	T1	--