

# HW 8: RMS with Resources – Sebastian Aybar – 1273441

(a)

$T^1(5; 15; 2; 2)$  - exec=5, period=15, allocR=2, userR=2

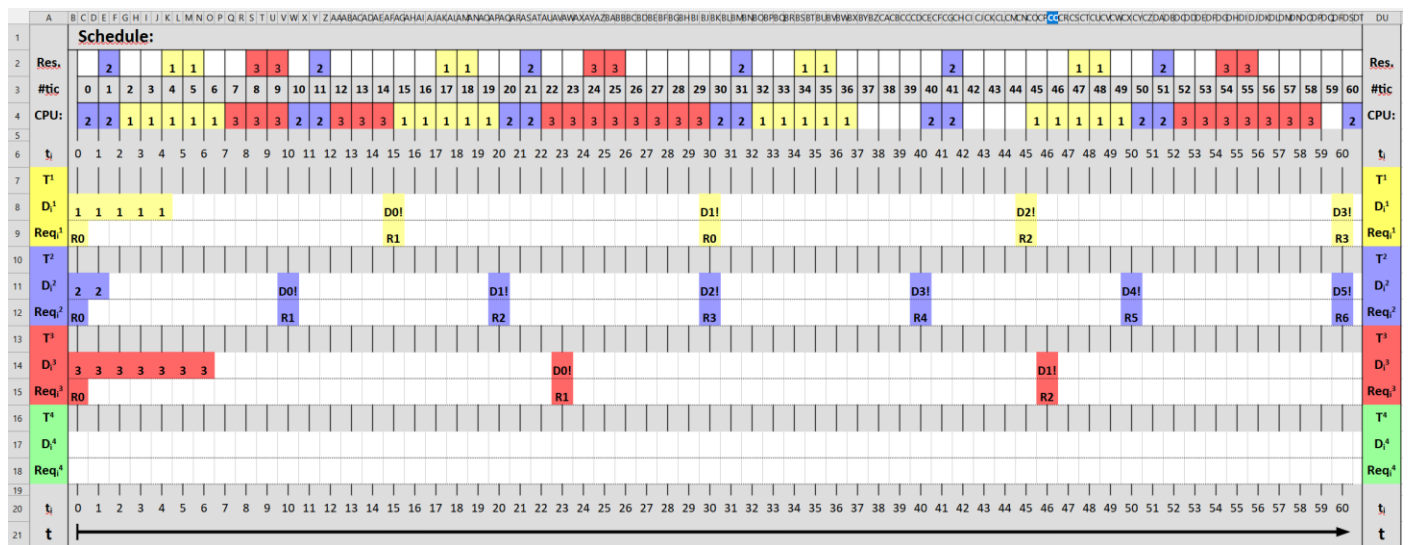
$T^2(2; 10; 1; 1)$  - exec=2, period=10, allocR=1, userR=1

$T^3(7; 23; 1; 2)$  - exec=7, period=23, allocR=1, userR=2

$T^2$  (Period=10) - höchste Priorität

$T^1$  (Period=15) - mittlere Priorität

$T^3$  (Period=23) - niedrigste Priorität



(b)

$T^1(4; 14; 1; 2)$  - exec=4, period=14, allocR=1, userR=2

$T^2(2; 10; 0; 0)$  - exec=2, period=10, allocR=0, userR=0 (keine Ressource)

$T^3(7; 30; 3; 4)$  - exec=7, period=30, allocR=3, userR=4

$T^2$  (Period=10) - höchste Priorität

$T^1$  (Period=14) - mittlere Priorität

$T^3$  (Period=30) - niedrigste Priorität

Necessity Test:  $4/14 + 2/10 + 7/30 = 0,7190 < 1 \Rightarrow$  Test bestanden

Schedulability Test:  $3 * (2^{(1/3)} - 1) = 0,780$

$U \leq \text{Treshhold} \Rightarrow$  scheduble

