

Task1 excution time : 1 micro secound

Task2 excution time : 1 micro secound

Task3 excution time : 1 micro secound

Task4 excution time : 43.31 micro secound

Task5 excution time : 5 mille secound

Task6 excution time : 12 mille secound

Hyper period = 100 ms ;

CPU load:

$$U = E1 + E2 + E3 + E4 + E5 + E6$$

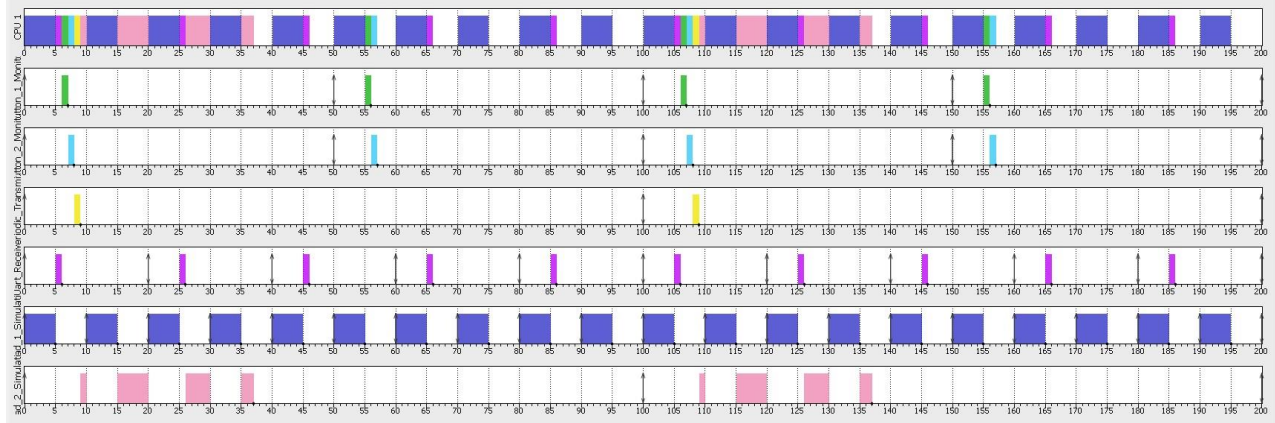
$$U = (1 \cdot 10^{-6} \cdot 2) + (1 \cdot 10^{-6} \cdot 2) + (43.31 \cdot 10^{-6} \cdot 1) + (1 \cdot 10^{-6} \cdot 5) + (5 \cdot 10^{-3} \cdot 10) + (12 \cdot 10^{-3}) = 63.04731\%$$

check system schedulability using URM:

$$U = (1 \cdot 10^{-6} / 50) + (1 \cdot 10^{-6} / 50) + (1 \cdot 10^{-6} / 100) + (43.31 \cdot 10^{-6} / 20) + (5 / 10) + (12 / 100) = .62$$

$$URM = 6 \cdot (2^{1/6} - 1) = .73477$$

$URM > U$ so the system is schedulabe



simso_project.xml

General Logs Tasks Scheduler Processors

Observation Window:
from 0.00 to 200.00 ms

	Total load	Payload	System load
CPU 1	0.7200	0.7200	0.0000
Average	0.7200	0.7200	0.0000

