

1- Tasks

$$\begin{aligned} T_1(P=50, D=50, E=0.012) &\rightarrow \text{Button-1-Monitor} \\ T_2(P=50, D=50, E=0.012) &\rightarrow \text{Button-2-Monitor} \\ T_3(P=100, D=100, E=0.013) &\rightarrow \text{Periodic-Transmitter} \\ T_4(P=20, D=20, E=0.012) &\rightarrow \text{Vart-Receiver} \\ T_5(P=10, D=10, E=5) &\rightarrow \text{Load-1-Simulation} \\ T_6(P=100, D=100, E=12) &\rightarrow \text{Load-2-Simulation} \end{aligned}$$

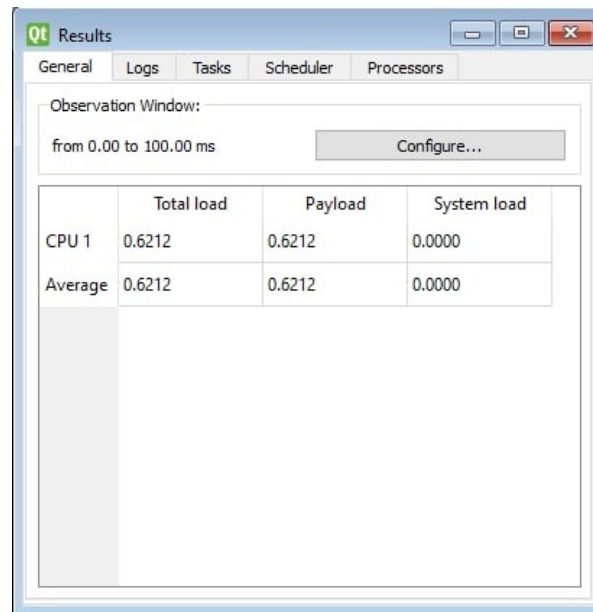
2- Hyper Period $\rightarrow 100$ ms

3- Calculating CPU Load

* Manual

$$\begin{aligned} \text{CPU Load} &= \sum_{i=1}^6 \frac{E_i}{P_i} \\ &= \frac{0.012}{50} + \frac{0.012}{50} + \frac{0.013}{100} + \frac{0.012}{20} \\ &\quad + \frac{5}{10} + \frac{12}{100} = 0.62121 = 62.121\% \end{aligned}$$

* Simso



Simso Gant Chart

