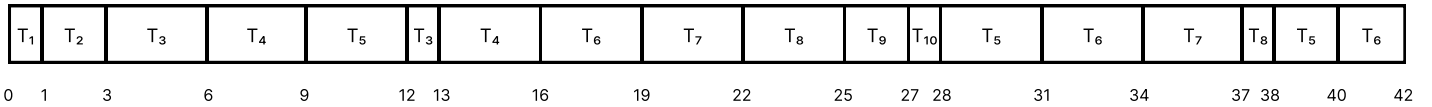


Task 3

3.1 Round Robin scheduling

Gantt chart:



Process	Waiting time	Process	Waiting time
T ₁	0	T ₆	$(16-11)+(31-19)+(40-34)= 23$
T ₂	1	T ₇	$(19-11)+(34-22)= 20$
T ₃	$3+(12-6)= 9$	T ₈	$(22-11)+(37-25)= 23$
T ₄	$6+(13-9)= 10$	T ₉	$25-11= 14$
T ₅	$9+(28-12)+(38-31)= 32$	T ₁₀	$27-11= 16$

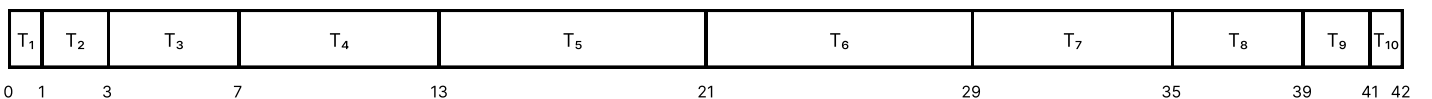
Among the ten tasks T₁-T₁₀, T₅ waits the longest and T₁ waits the shortest.

Waiting time for T₅ is 32 milliseconds. Waiting time for T₁ is 0 milliseconds.

Average waiting time is $0+1+9+10+32+23+20+23+14+16= 148/10 = 14,8$ milliseconds.

3.1 First-Come, First-Served Scheduling

Gantt chart:



Process	Waiting time	Process	Waiting time
T ₁	0	T ₆	$21-11= 10$
T ₂	1	T ₇	$29-11= 18$
T ₃	3	T ₈	$35-11= 24$
T ₄	7	T ₉	$39-11= 28$
T ₅	13	T ₁₀	$41-11= 30$

Among the ten tasks T₁-T₁₀, T₁₀ waits the longest and T₁ waits the shortest.

Waiting time for T₁₀ is 30 milliseconds. Waiting time for T₁ is 0 milliseconds.

Average waiting time is $0+1+3+7+13+10+18+24+28+30 = 134/10 = 13,4$ milliseconds.



T2

T3

T4

T5



T4

TO

T7

T8

T19



T5

TO

T7



T5

TO



T2

T3

T4

T5

T6

T7

T8

T9

