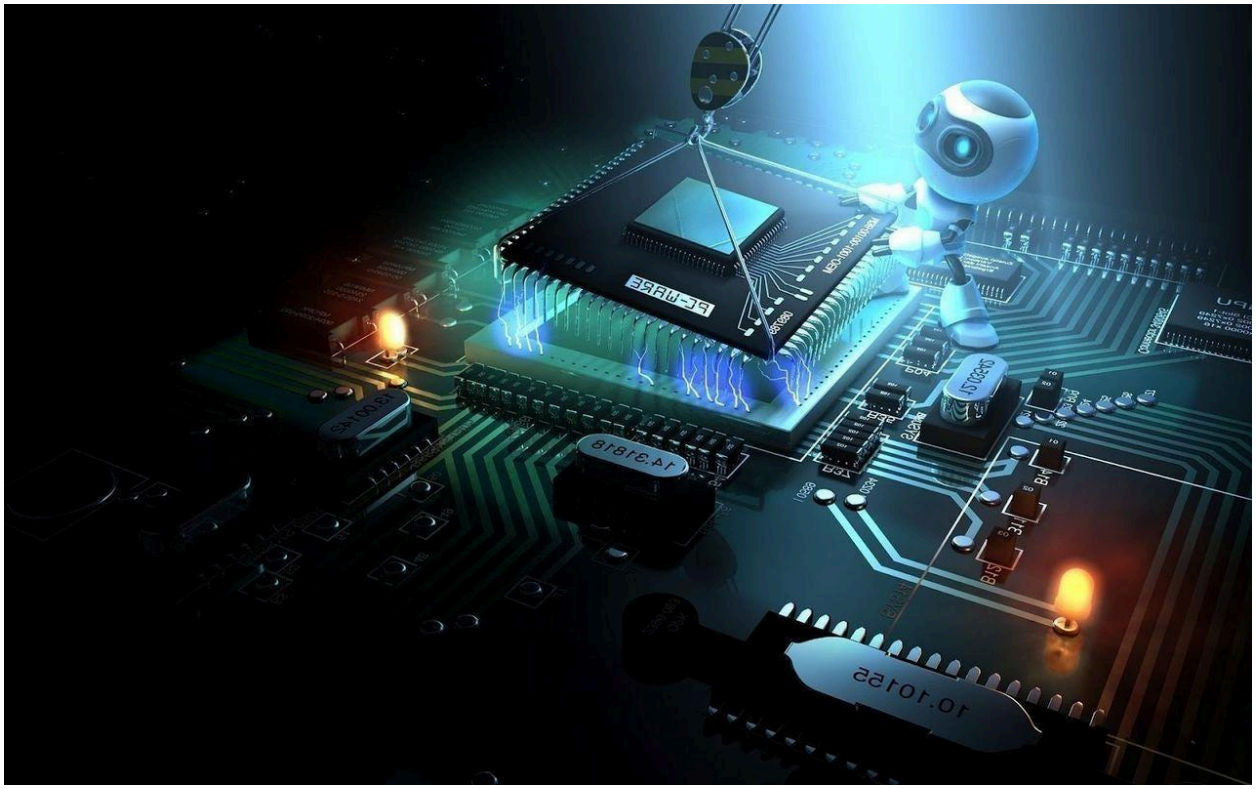
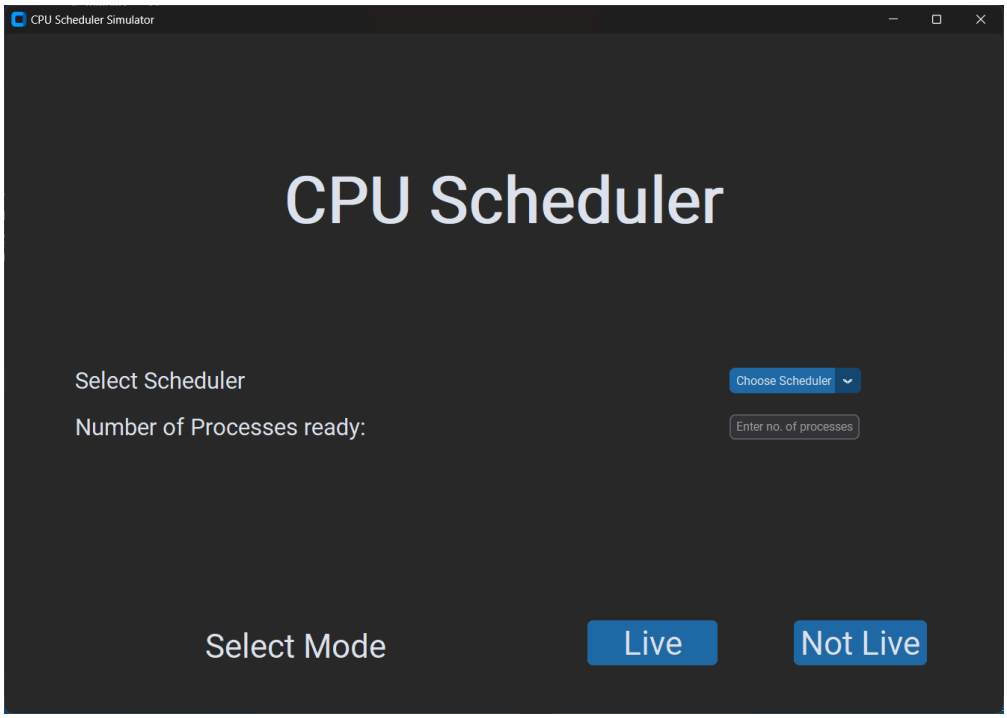
CPU Scheduler

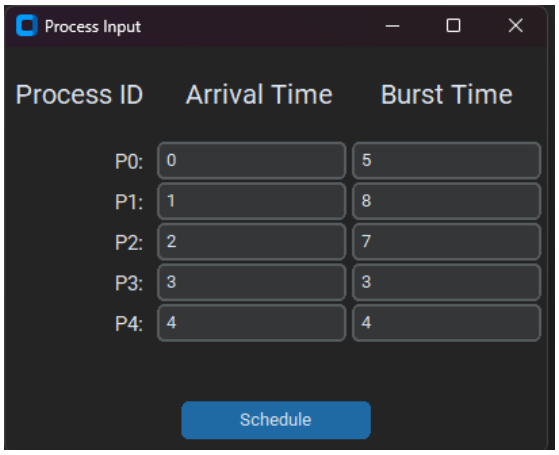


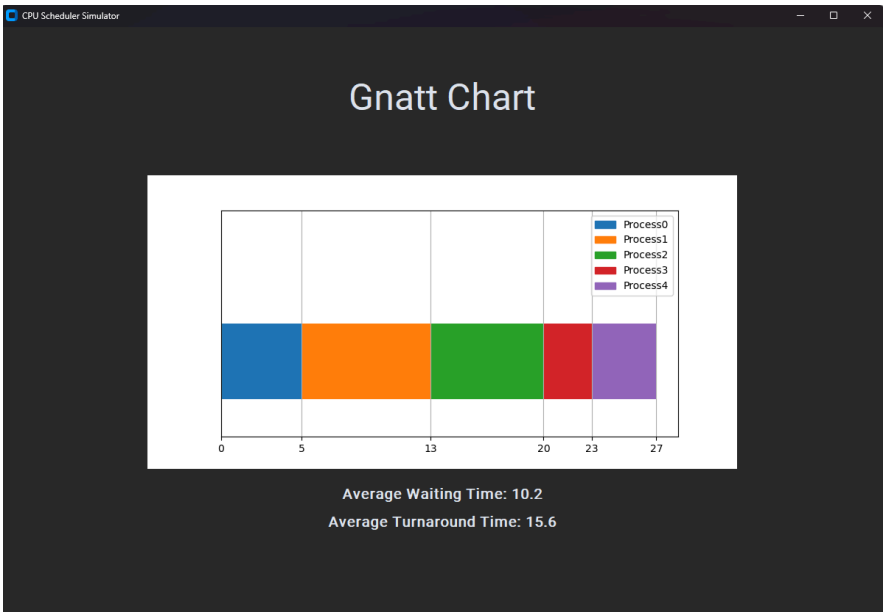
Name	ID
Abdelrahman Ibrahim Abdulaziz Salem	2000925
Ahmed AbdelRahman Ahmed AbdelRahman	2002126
Mohamed Yasser Mohamed ElShahat	2002085
Marten Ehab Fouad Askander	2101642
Omar Salah Mansour Abdelkader	2002081

1) Program main window:

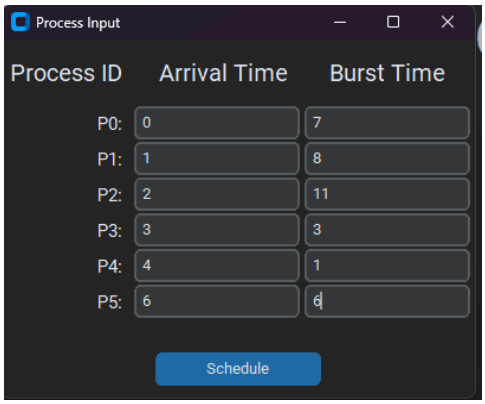


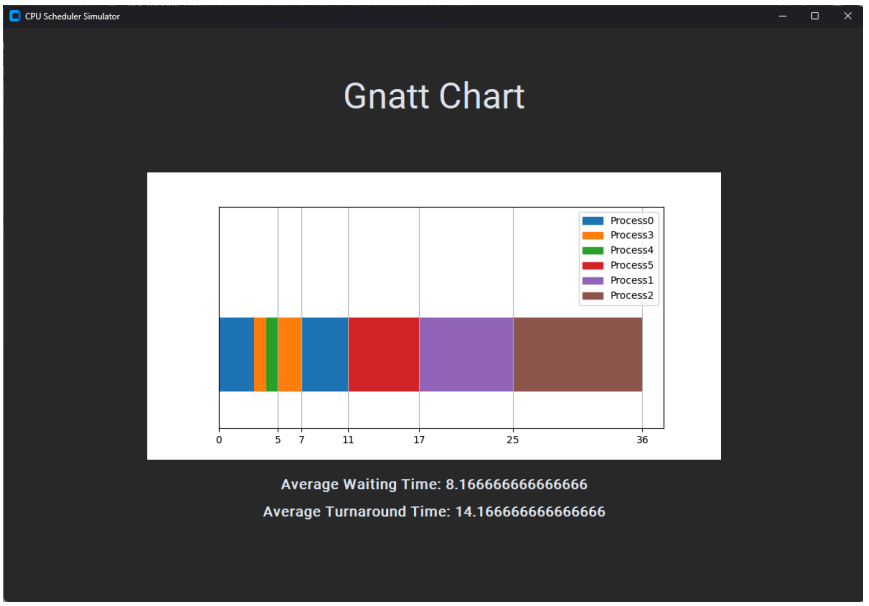
2) Non-Live Scheduling
   - FCFS



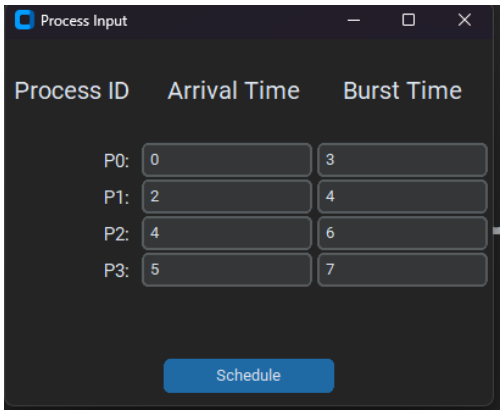


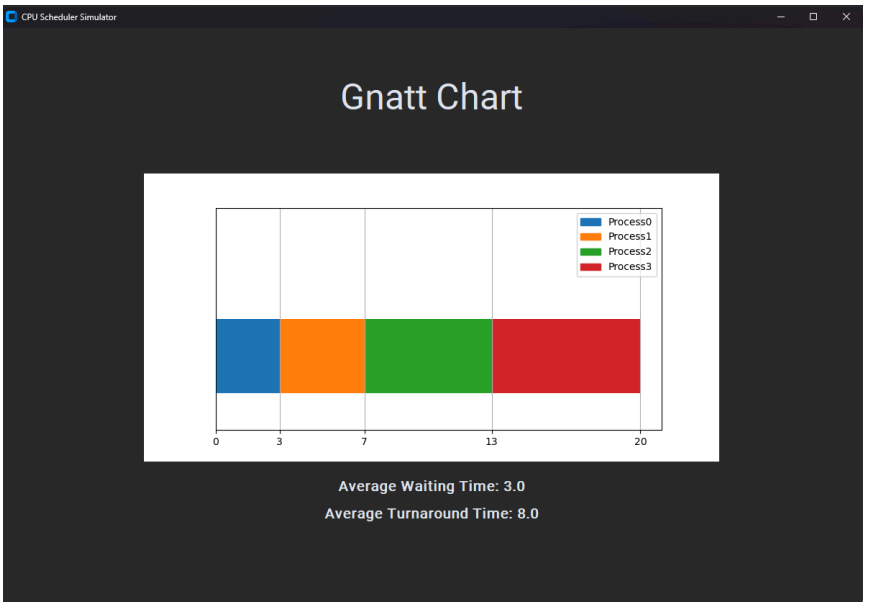
- SJF (Preemptive)



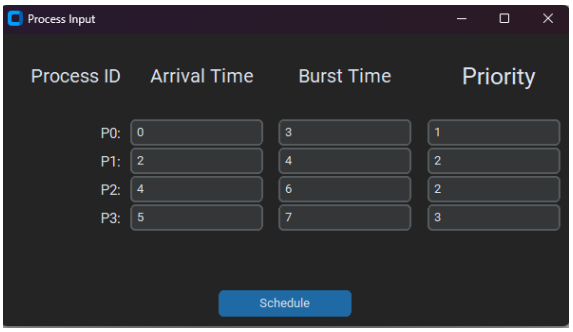


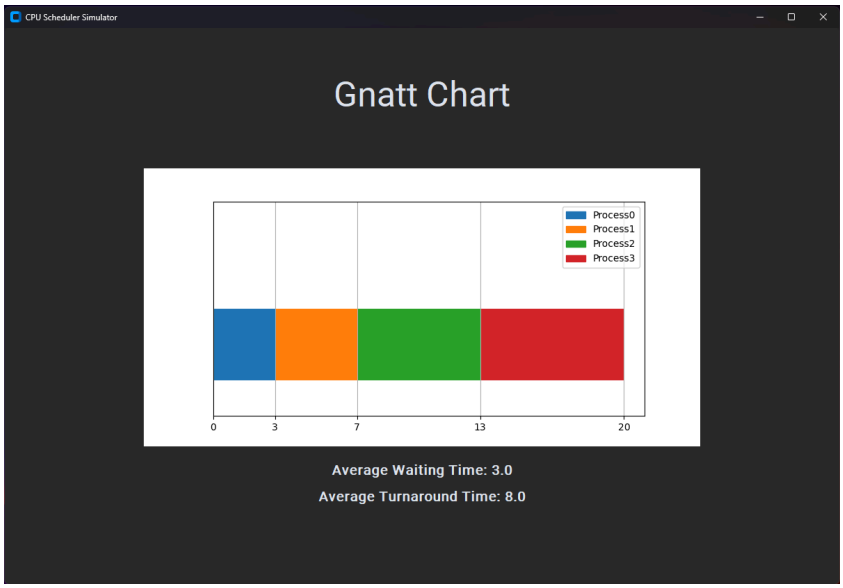
- SJF (Non-Preemptive)



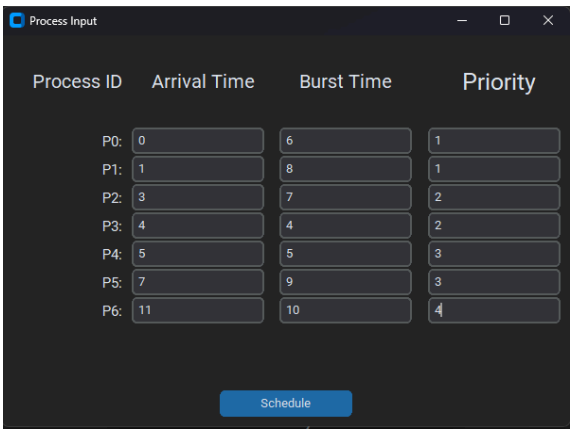


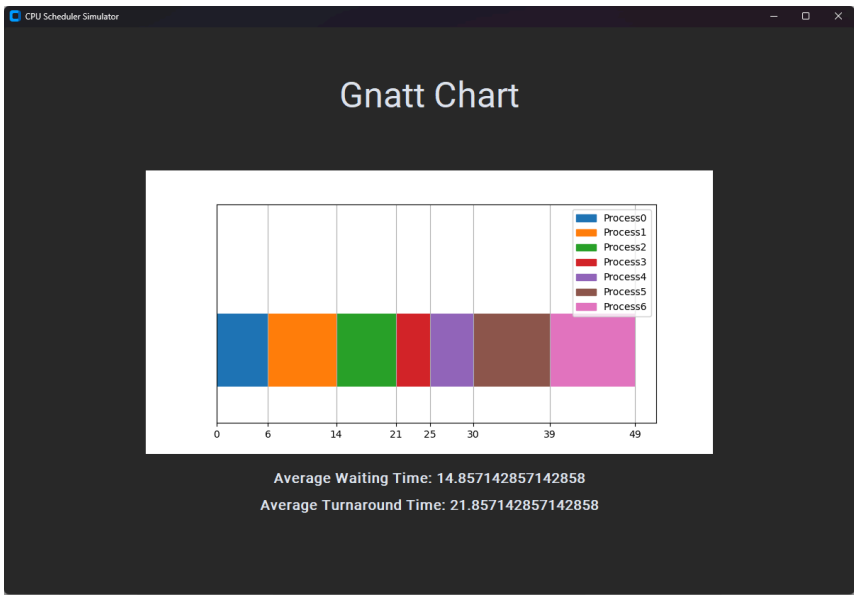
- Priority (Preemptive)



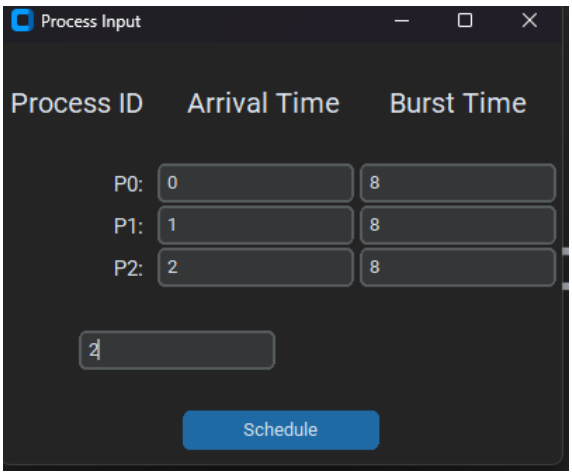


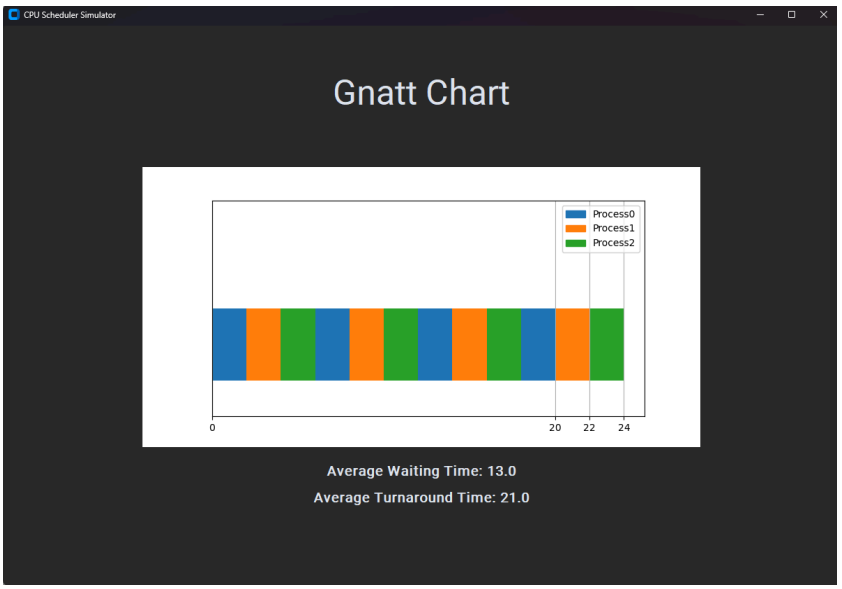
- Priority (Non-Preemptive)





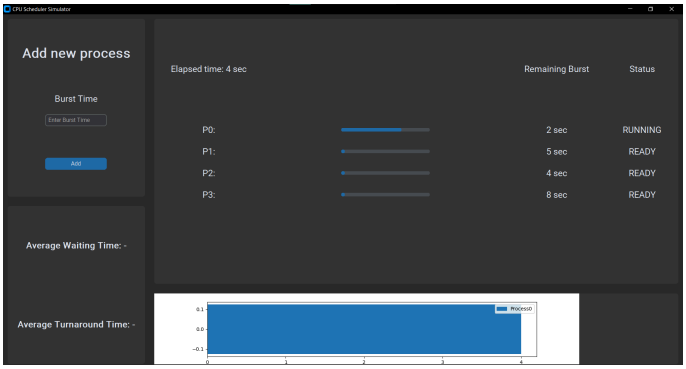
- Round Robin

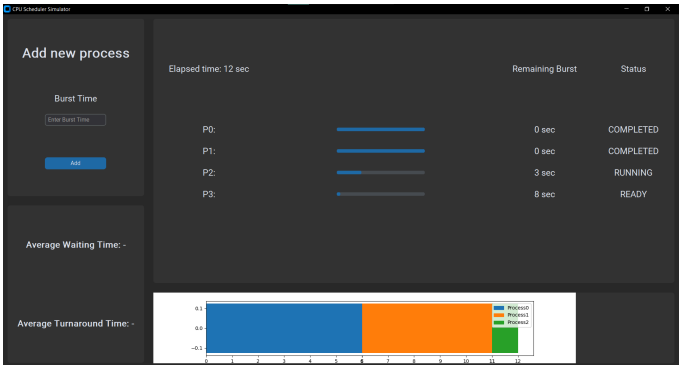

Process Input
Process ID
Arrival Time
Burst Time
P0:
0
8
P1:
1
8
P2:
2
8
2
Schedule

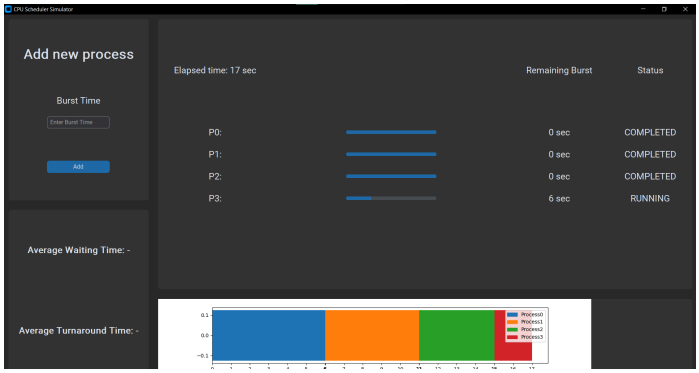

CPU Scheduler Simulator
Gnatt Chart
Process0
Process1
Process2
0
20
22
24
Average Waiting Time: 13.0
Average Turnaround Time: 21.0

3) Live Scheduling
   - FCFS
   - SJF (Preemptive)
   - SJF (Non-Preemptive)
   - Priority (Preemptive)
   - Priority (Non-Preemptive)
   - Round Robin

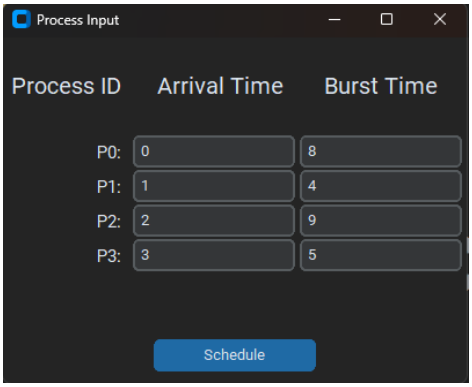
FCFS :

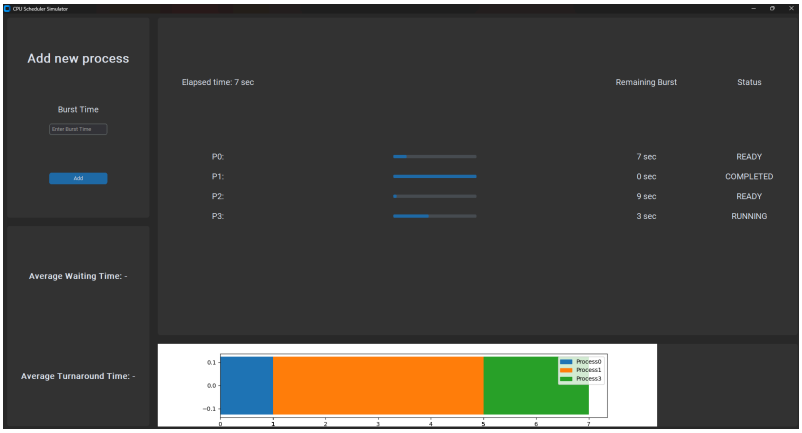


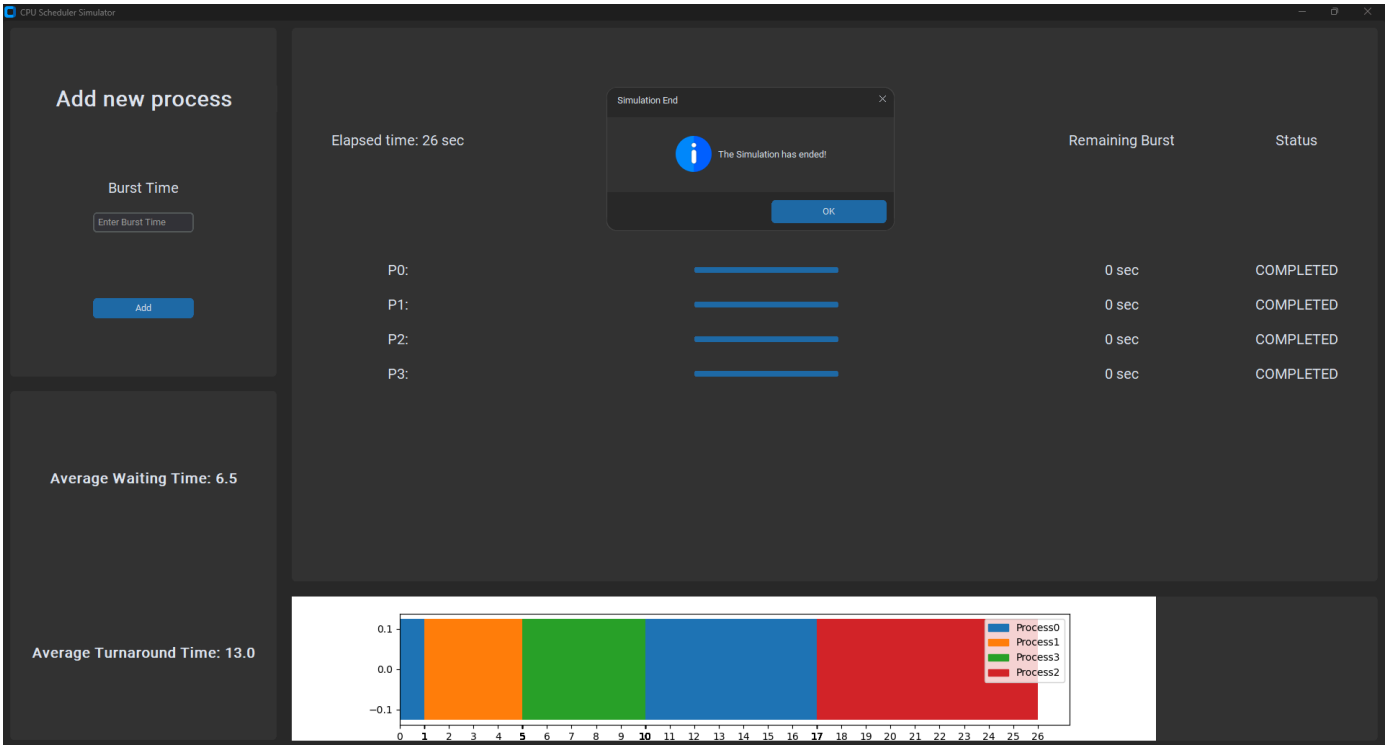




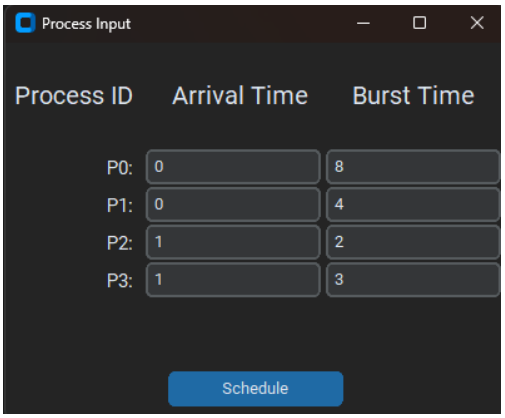
SJF (Preemptive):

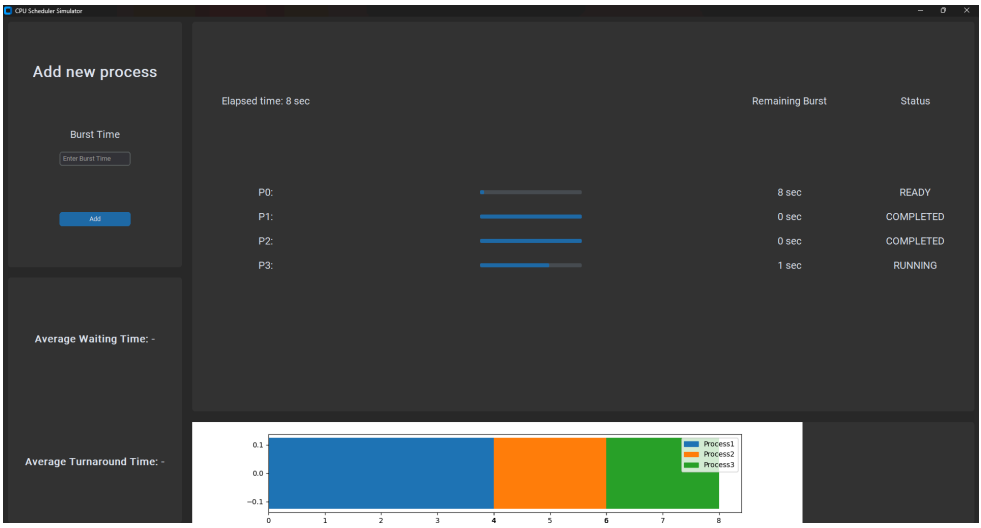


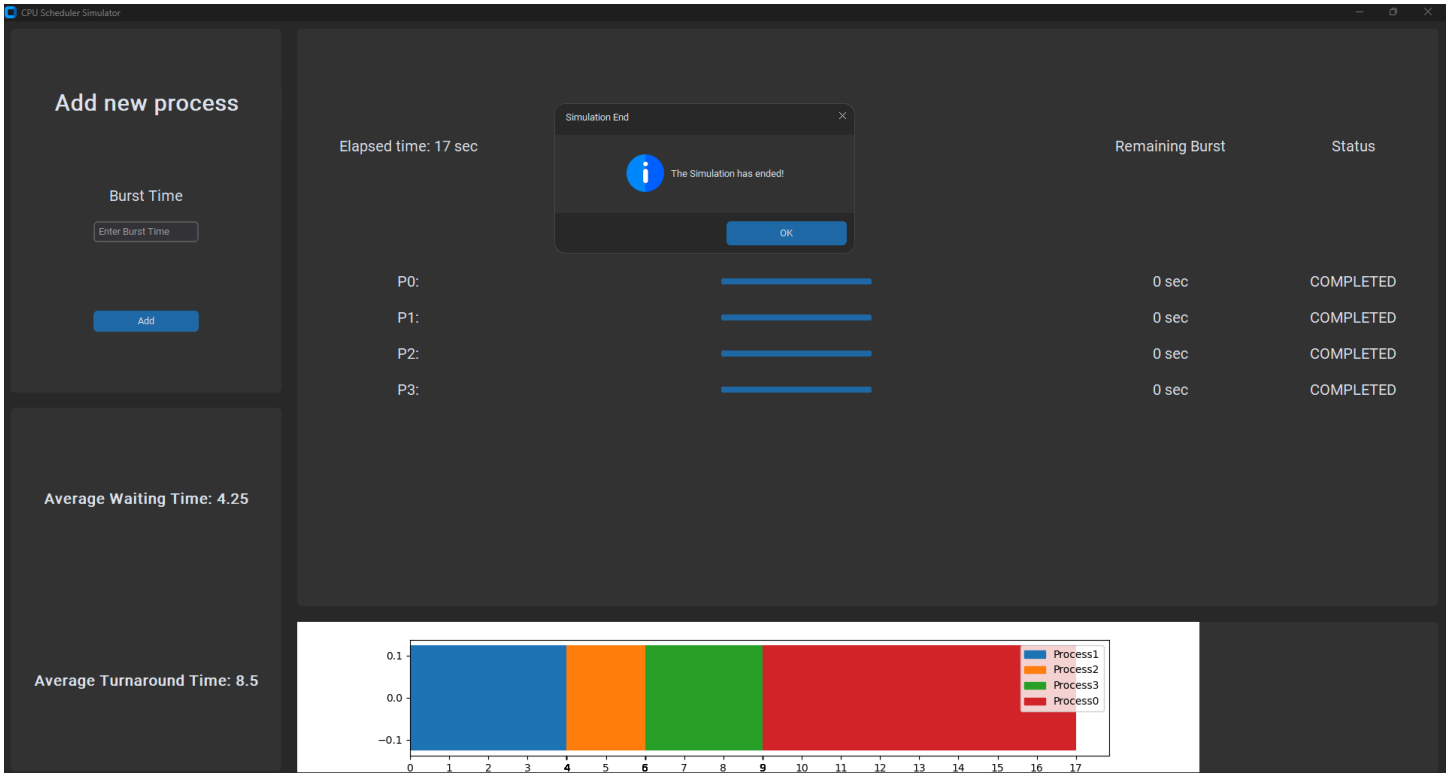




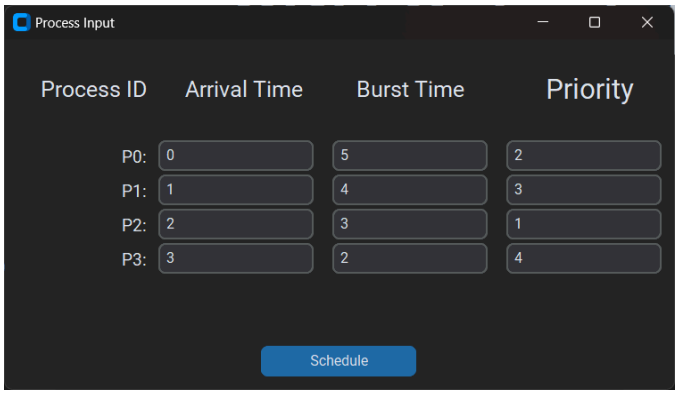
SJF (Non–Preemptive):

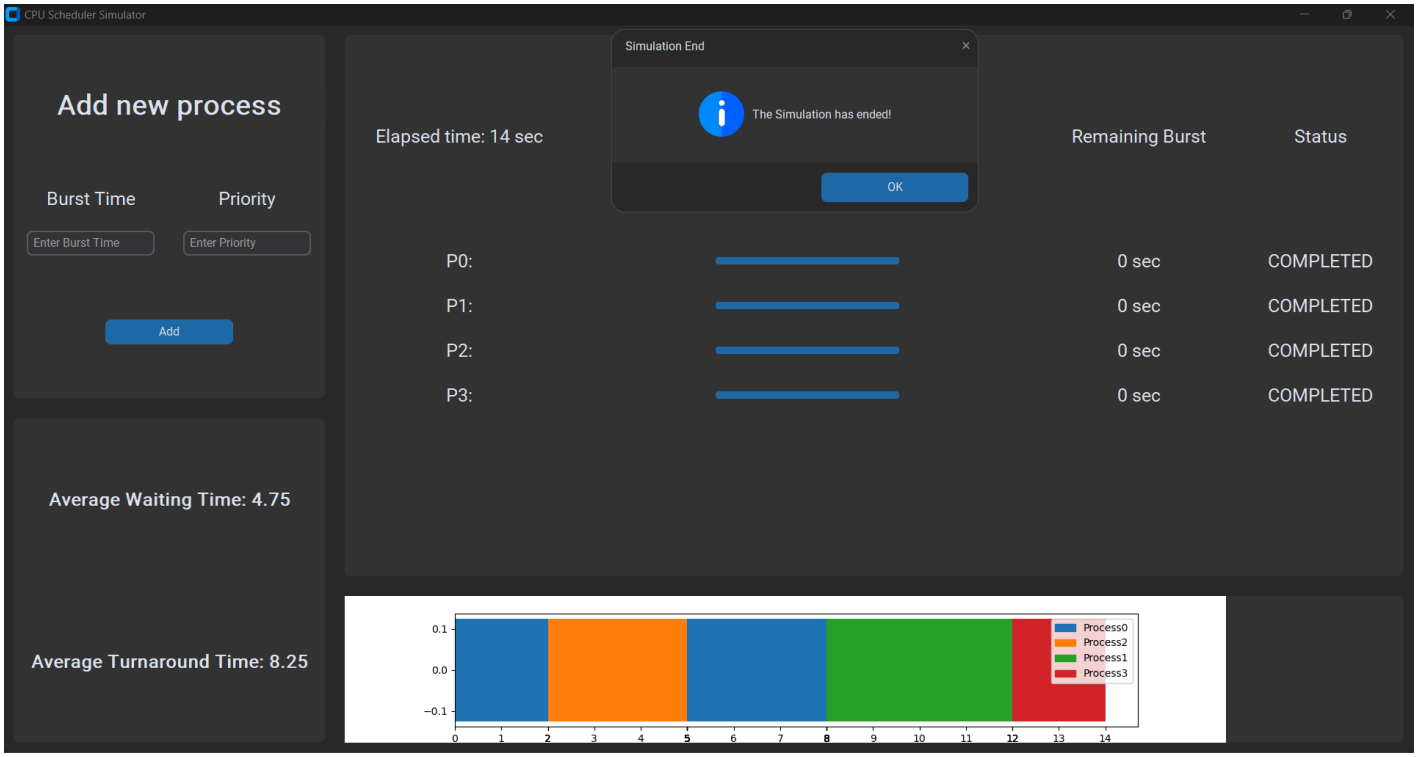




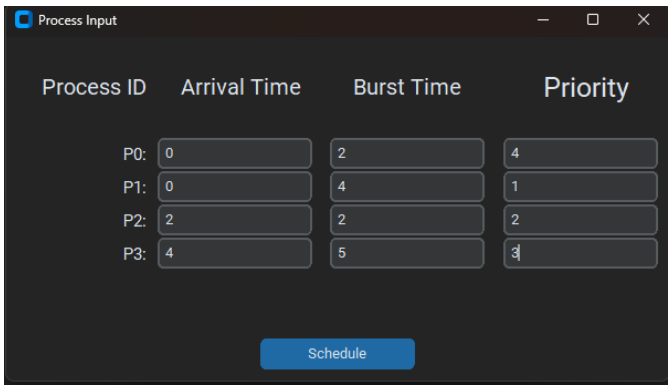


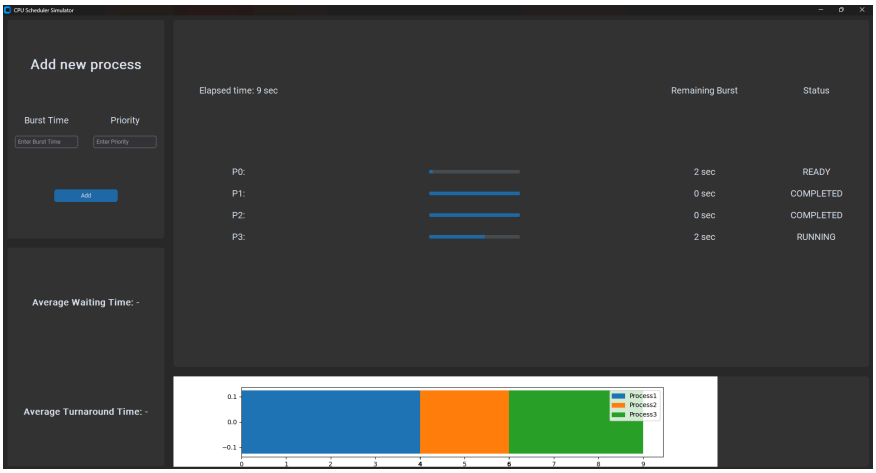
Priority(Preemptive):

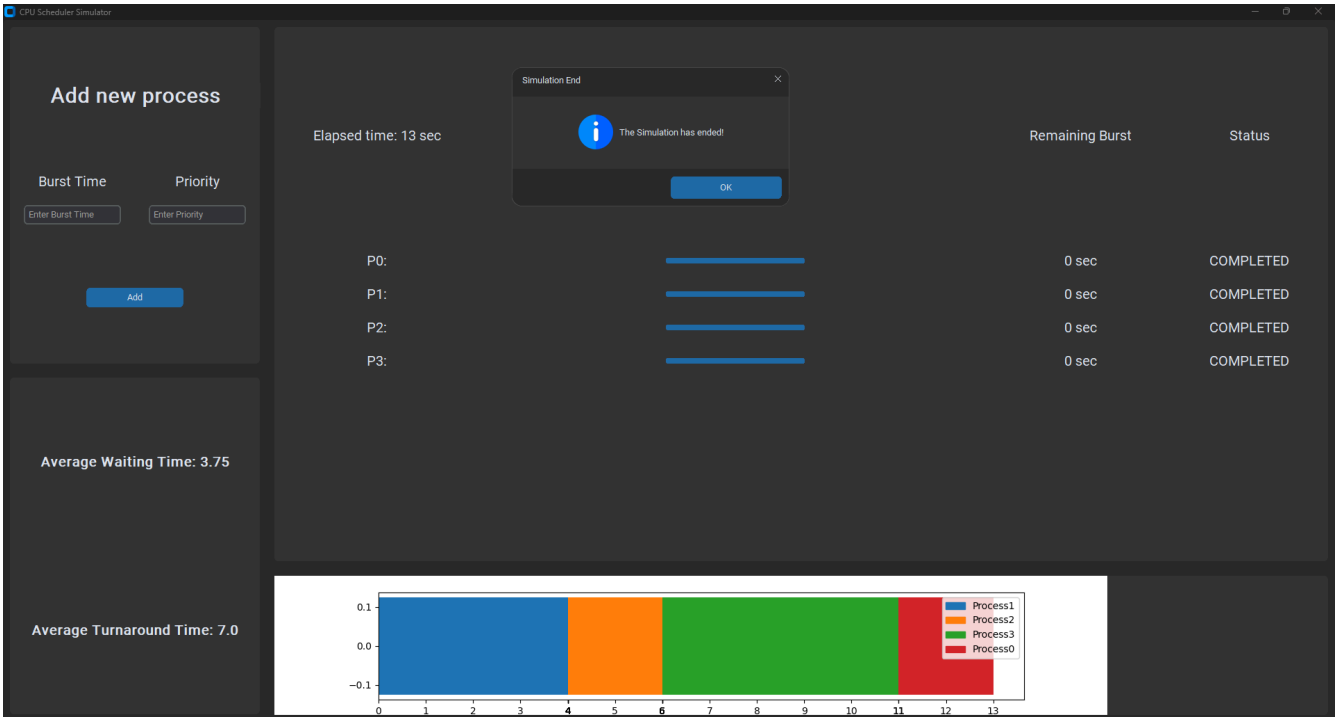




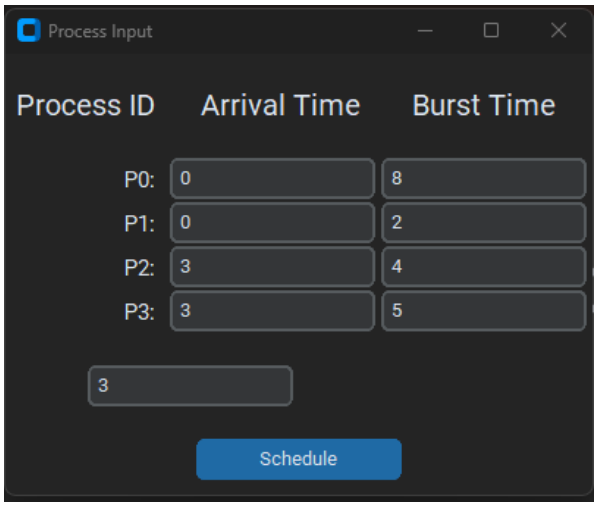
Priority(Non–Preemptive):

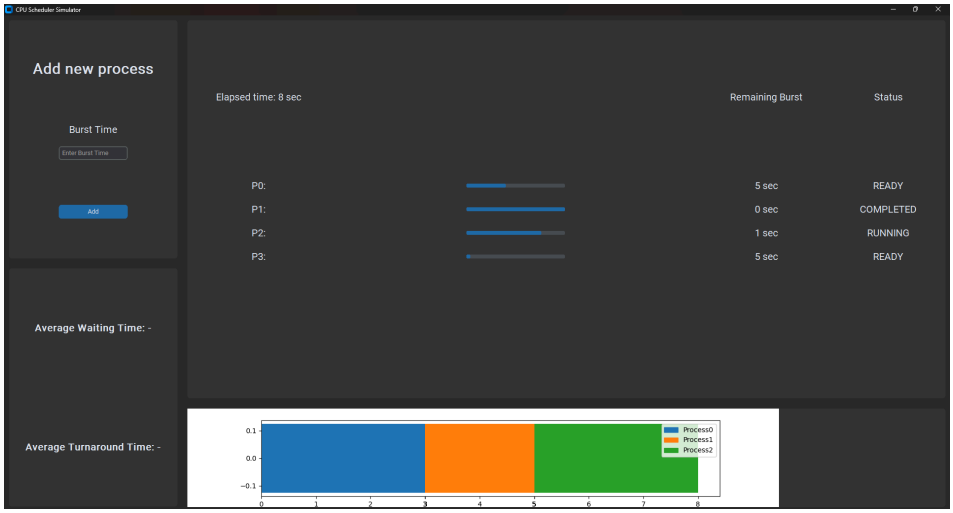


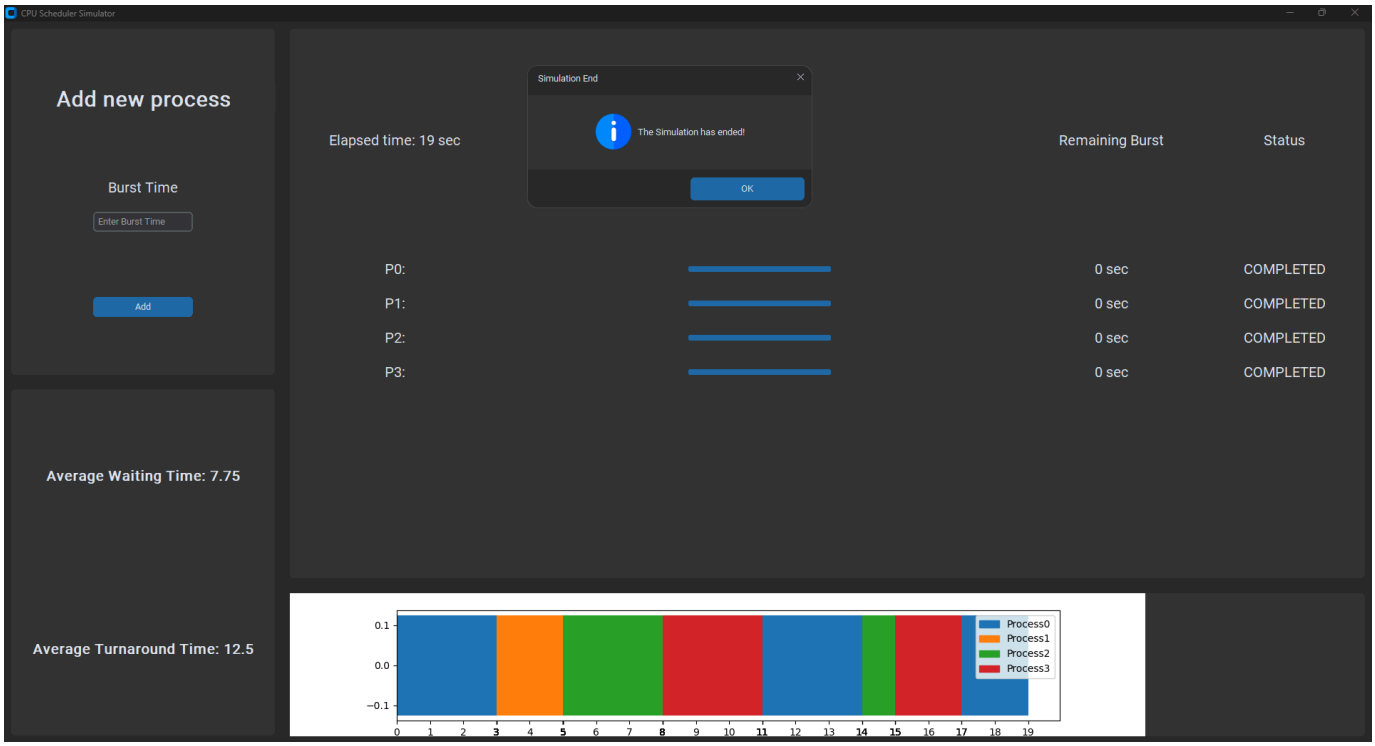




Round Robin:


Process Input
Process ID
Arrival Time
Burst Time
P0: 0 8
P1: 0 2
P2: 3 4
P3: 3 5
3
Schedule


Add new process
Burst Time
Enter Burst Time
Add
Average Waiting Time: -
Average Turnaround Time: -
Elapsed time: 8 sec
Remaining Burst
Status
P0: 5 sec READY
P1: 0 sec COMPLETED
P2: 1 sec RUNNING
P3: 5 sec READY
Process0
Process1
Process2


CPU Scheduler Simulator
Add new process
Burst Time
Enter Burst Time
Add
Average Waiting Time: 7.75
Average Turnaround Time: 12.5
Simulation End
The Simulation has ended!
OK
Elapsed time: 19 sec
Remaining Burst
Status
P0: 0 sec COMPLETED
P1: 0 sec COMPLETED
P2: 0 sec COMPLETED
P3: 0 sec COMPLETED
Process0
Process1
Process2
Process3

Github Repo:

[MohdYasser1/CPU-Scheduler-Simulator: This is a CPU Scheduler Simulator with simulates different scheduling algorithms on processes (github.com)]

Installer Link:

[https://drive.google.com/drive/folders/1ZRyyqsF5DtjkCWanHRHW0q9TyBDg5T0H]