## CS241 - Scheduling

Algorithms: Shortest Job First

This week you are going to be different scheduling methods, pros and cons.

## Intro Questions

What is arrival time? How about start time? End Time?

What is Turnaround Time?

What is Response Time?

What is Wait Time?

## What is the Convoy Effect?

Shade in when the jobs are running. For all of the problems assume that the processes have the following arrival time. Ties are broken by arrival time.

1. P1: Arrival: 500 ms , Runtime: 500 ms
2. P2: Arrival: Oms, Runtime: 1000 ms
3. P3: Arrival: 500 ms , Runtime: 1000 ms
4. P4: Arrival: 1000 ms , Runtime: 1500 ms
5. P5: Arrival: 500ms, Runtime: 2000 ms


Algorithms: Pre-emptive Shortest Job First
Algorithms: Priority

Same times as last problem


Algorithms: First Come First Served

1. P 1 : Arrival: 500 ms , Runtime: 500 ms
2. P2: Arrival: 2000 ms , Runtime: 1000 ms
3. P3: Arrival: 1000 ms , Runtime: 1000 ms
4. P4: Arrival: 500 ms , Runtime: 1500 ms
5. P5: Arrival: Oms, Runtime: 2000 ms

Scheduling


1. P1: Arrival: 500 ms , Runtime: 500 ms , Priority: 2
2. P2: Arrival: 2000 ms , Runtime: 1000 ms , Priority: 5
3. P3: Arrival: 1000 ms , Runtime: 1000 ms , Priority: 3
4. P4: Arrival: 500 ms , Runtime: 1500 ms , Priority: 1
5. P5: Arrival: Oms, Runtime: 2000ms, Priority: 4

Scheduling


Algorithms: Round Robin
Quanta $=500 \mathrm{~ms}$ Same scheduling as the last one.


