

OS Schedulers - Basic Algorithms

Implement different OS scheduling algorithms. The program should take as input: no of processes, <arrival time, burst time> of each process. It should output the schedule, average completion time & average waiting time for each scheduling algorithm.

eg: I/P

2

0, 5

1, 3

2

Comment
(# of processes)

(time quanta for Round Robin scheduling)
FCFS

O/P

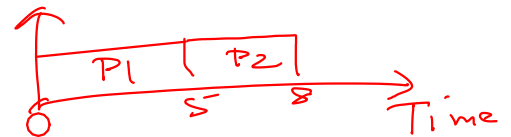
FCFS algorithm:

0 - 5 : P₁

5 - 8 : P₂

Average completion time: 6.5

Average waiting time: 2



$$(5+8)/2 = 6.5$$

$$(0+4)/2 = 2$$

Round Robin algorithm:

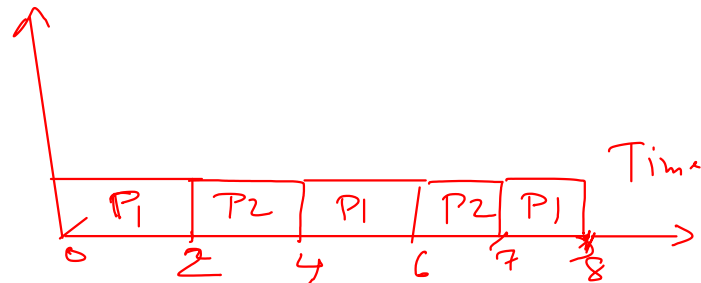
0 - 2 : P₁

2 - 4 : P₂

4 - 6 : P₁

6 - 7 : P₂

7 - 8 : P₁



Average completion time: 7.5

Average waiting time: 3.5

$$(8+7)/2 = 7.5$$

$$\frac{(2+1) + (2+2)}{2} = 3.5$$