Operating System

Topic: Process Scheduling, First Come First Serve

Assignment-1

1. calculate the average waiting time for above example?

Process	Burst time	Arrival time
P1	6	2
P2	2	5
P3	8	1
P4	3	0
P5	4	4

2. Consider the following processes that arrive as shown as below follows FCFS scheduling method.

Process	Arrival Time	Burst Time
P1	0	3
P2	2	4
P3	4	2
P4	4	1

What is the Average TAT?

Hint: Turn Around Time (TAT) *=Burst time + Waiting time*

(a) 4.95 ms **(b) 4.75 ms**

(c) 3.75 ms **(d) 5 ms**

What is the throughput for above problem?

(a) 0.3 jobs/sec **(b) 0.4 jobs/sec**

(c) 0.5 jobs/sec **(d) 0.6 jobs/sec**

What is the average Response time for above problem?

(a) 2.25 **(b) 3.25**

(c) 4.5 **(d) 5**

What is the average waiting time for the above problem?

(a) 1.25	**(b) 2.25**
(c) 2.5	**(d) 3.5**

What is the CPU utilization?

(a) 50%	**(b) 90%**
(c) 100%	**(d) None**

3.Consider the following set of processes that arrive at time '0', with the length of CPU Burst-time given in millisecond:

Process	Burst Time
P1	1
P2	7
P3	3

What is the average waiting time when we FCFS Scheduling algorithms?

(a) 1.67, 3	(b) 2.67, 3
(c) 1.76, 3.5	(d) 1.66, 2

4. Which of the following information is not part of Process Control Block?

(1) Process State

(2) Process Page table

(3) List of Open files

(4) Stack Pointer

(a) Only 3	(b) 3 & 4
(c) 2 and 4	(d) None

5.Progress can be explained as:

(a) Speed of the Execution of the processes
(b) Maximum utilization of CPU
(c) the process which is not interested to enter Critical Section should not stop the other processes to enter CS
(d) All of the above.