


Operating System (CSC 330)

BSCS- 5th A

 Bahria University Discovering Knowledge	Department of Computer Science Bahria University, Lahore Campus
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Assignment No 1

Due Date: Mar 05, 2024

Total marks = 5

Name:

Roll No:

CLOs
CLO2: Apply the concepts of memory management, I/O management CPU management and processor management etc.

Guidelines:

- Assignments are strictly individual (not in groups).
- Assignments should be handwritten and concise.
- Sharing assignment ideas, copying the content, and solution is permissible with your class fellows (if anyone found with such case, maximum marks of any member will be divided by number of persons who copied with each other).
- Please submit the assignment as per the given deadline. Late submitters will be penalized.
- Use blank A4 size page for assignment submission.
- Submit the hard copy of assignment during class (on the day of deadline) and scanned copy at LMS on or before due date.

Marks Evaluation Criteria:

Feature	Assessment Criteria	Marks
Present ability	The assignment is clean, properly formatted, table of contents, title page contains the name/logo of the institute, submitter's name, teacher's name.	0.5
Assignment Content	Questions solved correctly and presented effectively.	4
Deadline Met	Assignment is submitted within a given deadline.	0.5
Deadline Missed	Assignment deadline is missed / and submitted late.	-0.5 / and -0.5 per day

Question – 1:

You are supposed to take a system of at-least five processes (sample system is given below) to perform the CPU scheduling schemes that are mentioned below:

- i. First Come First Serve (FCFS) – Non-Preemptive.
- ii. Pre-emptive Shortest Job First (SJF) – Preemptive and Non-Preemptive both.
- iii. Pre-emptive Priority – Preemptive and Non-Preemptive both.
- iv. Round Robin (RR) – Non-Preemptive.

Note:

- Illustrate the Gant chart of processes execution under each scheduling scheme.
- Calculate average wait time and turnaround time of processes under each scheduling scheme.
- Calculate throughput of processes under each scheduling scheme.
- Write down the advantages and disadvantages of each scheduling scheme in your own words (No online or Chat GPT content).
- Design your own system of processes. It is not allowed to take it from the internet.

Sample System:

Process	Burst Time	Priority	Arrival time
P0	8	5	0
P1	2	4	2
P2	1	6	4
P3	3	3	6
P4	5	2	5
P5	4	7	3

Do your own, some One is watching!

Best of Luck!