

**SSN COLLEGE OF ENGINEERING, KALAVAKKAM**  
**DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING**  
**CS8461 - OPERATING SYSTEM LAB**

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**Lab Exercise 5                      Implementation of FCFS and SJF Scheduling Policies**

**Aim:**

Develop a menu driven C program to implement the CPU Scheduling Algorithms FCFS, SJF.

**Algorithm:**

1. Read the following
  - a. Number of processes
  - b. Process IDs
  - c. Arrival time for each process
  - d. Burst Time for each process
2. Design a menu with FCFS and SJF options
3. Upon selection of menu option apply the corresponding algorithm.
4. Compute the Turnaround Time, Average waiting Time for each of the algorithm.
5. Tabularize the results.
6. Display the Gantt Chart

**Sample input/output:**

CPU SCHEDULING ALGORITHMS

1. FCFS
2. PSJF
3. NPSJF
4. EXIT

Enter your option: 1

## FCFS CPU SCHEDULER

Number of Processes: 5

Process ID: P1

Arrival Time: 0

Burst Time: 4

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Process ID: P5

Arrival Time: 6

Burst Time: 3

### OUTPUT:

#### **Gantt Chart:**

P1	P2	P3	P4	P5
0	5	10	14	16

Process ID	Arrival Time	Burst Time	Turnaround Time	Waiting Time	Response Time
P1	0	4	*****	*****	*****
P2	1	3	*****	*****	*****
*					
*					
Average:			*****	*****	*****

Do the same for SJF Scheduling