

Name: Ammar Ahmed

CMS: 023-19-0107

Representation of the findings

Task 01:

- * Task 01 is implemented using FCFS policy, using only single thread.
- * For each job the cpu burst is generated randomly in range 0.2 to 0.9.

Size of memory Barrier	Avg wait time	Avg turnaround
10	5.9 ms	6.1 ms
20	11.66 ms	12.06 ms
30	18.08 ms	18.49 ms
40	24.73 ms	25.27 ms
50	31.74 ms	32.29 ms
60	35.76 ms	36.27 ms

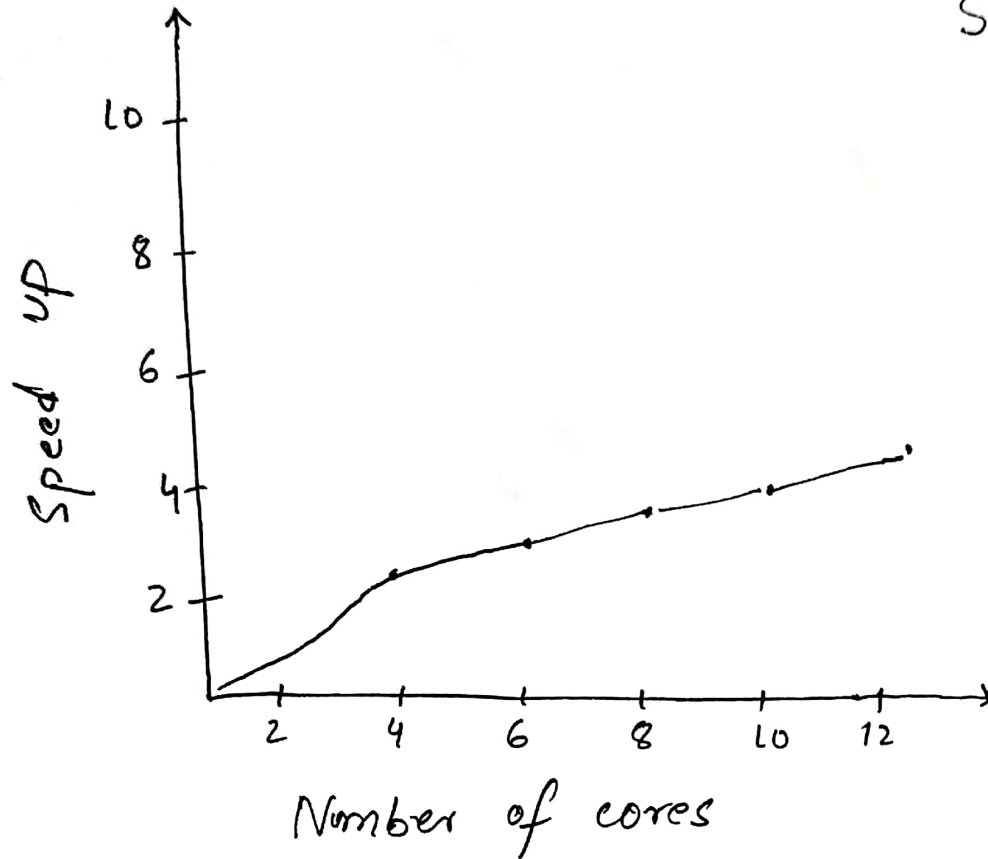
* with all above conditions the system throughput was $0.56 \frac{\text{jobs}}{\text{ms}}$

Task 02:

- * Task 02 is implemented using Round Robin scheduling policy, with time quantum = 200ms.
- * Let us observe the speed up/performance behaviour by increasing the number of threads.

Using Amdahl's Law, I've observed the following results.

$$S = 0.25$$



Note: The performance of Round Robin scheduling algorithm also depends on the time quantum.