**Q6. Suppose that the following processes arrive for execution at the times indicated. Each process will run for the amount of time listed. In answering the questions, use nonpreemptive scheduling and base all decisions on the information you have at the time the decision must be made.**

**Process             Arrival Time          Burst Time**

**P1               0.0                          8**

**P2               0.4                          4**

**P3               1.0                          1**

**What is the average turnaround time for these processes with the FCFS scheduling algorithm?**

The average turnaround time with the First-Come-First-Serve (FCFS) scheduling algorithm can be calculated as follows:

Completion time for P1 = Arrival time for P1 + Burst time for P1 = 0.0 + 8 = 8.0

Completion time for P2 = Completion time for P1 + Burst time for P2 = 8.0 + 4 = 12.0

Completion time for P3 = Completion time for P2 + Burst time for P3 = 12.0 + 1 = 13.0

Turnaround time for P1 = Completion time for P1 - Arrival time for P1 = 8.0 - 0.0 = 8.0

Turnaround time for P2 = Completion time for P2 - Arrival time for P2 = 12.0 - 0.4 = 11.6

Turnaround time for P3 = Completion time for P3 - Arrival time for P3 = 13.0 - 1.0 = 12.0

Average turnaround time = (8.0 + 11.6 + 12.0) / 3 = 10.53 (rounded to two decimal places)

Therefore, the average turnaround time for these processes with the FCFS scheduling algorithm is 10.53 units of time.