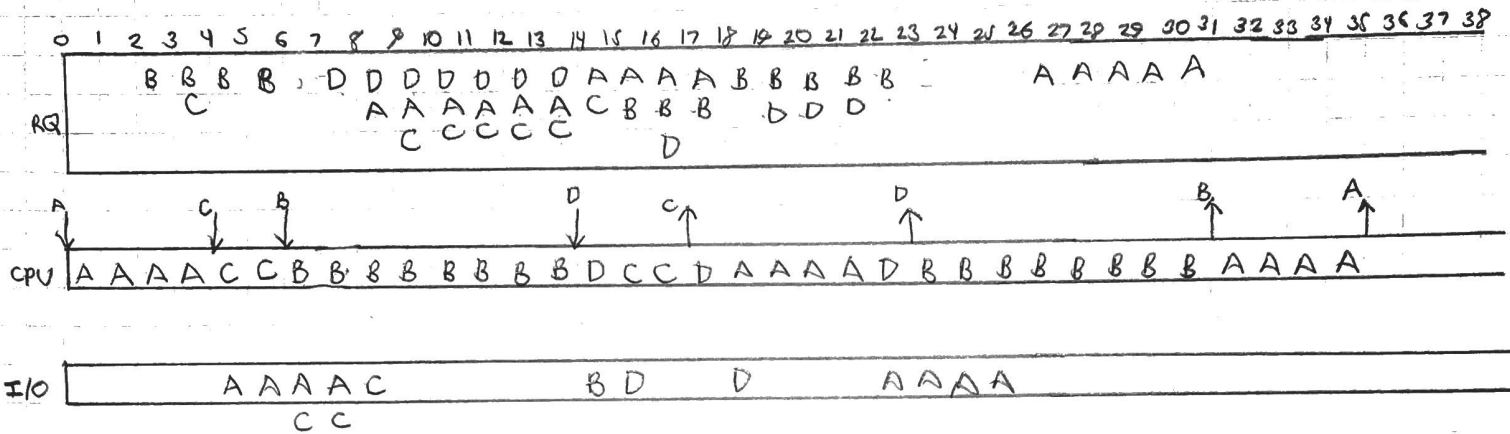


SHORTEST PROCESS FIRST (NON-PREEMPTIVE)

PROCESS	ARRIVAL TIME	EXEC ₁	I/O ₁	EXEC ₂	I/O ₂	EXEC ₃
A	0	4	4	4	4	4
B	2	8	1	8	/	/
C	3	2	1	2	/	/
D	7	1	1	1	1	1



METRICS:

$$\text{CPU UTILIZATION} = \frac{35}{35} = 100\%$$

$$\text{CPU THROUGHPUT} = \frac{4}{35} = 0.11$$

$$\text{TAT}_A = 35 - 0 = 35$$

$$\text{TAT}_B = 31 - 2 = 29$$

$$\text{TAT}_C = 17 - 3 = 14$$

$$\text{TAT}_D = 23 - 7 = 16$$

$$\text{TAT AVERAGE} = \frac{(35 + 29 + 14 + 16)}{4} = 23.5$$

$$\text{WAIT TIME}_A = 10 + 5 = 15$$

$$\text{WAIT TIME}_B = 4 + 8 = 12$$

$$\text{WAIT TIME}_C = 1 + 6 = 7$$

$$\text{WAIT TIME}_D = 7 + 1 + 3 = 11$$

$$\text{WAIT TIME AVERAGE} = \frac{45}{4} = 11.25$$

$$\text{RESPONSE TIME}_A = 0$$

$$\text{RESPONSE TIME}_B = 4$$

$$\text{RESPONSE TIME}_C = 1$$

$$\text{RESPONSE TIME}_D = 7$$

$$\text{RESPONSE TIME AVERAGE} = 3.0$$