

Scheduling

1)

Run	1	2	3	4	5
Q	1	2	4	8	16
Acc	1	3	7	15	31

2)

$$A: 50/8 + 150/4 + 300/2 + 85 = 278,75$$

$$B: 300/8 + 150/4 + 85/2 + 50 = 167,5$$

B first

3.1)

CPU bound : processes spend most of their time using the cpu(calculations etc.)

I/O bound: processes that read or write data to a file for example

3.2)

CPU bound processes need higher quanta.

I/O processes need lower quanta to be effective

4)

period: 50 100 200 250 c: 35 20 10 x

$$\text{Sum: } C_i / P_i \leq 1$$

$$35/100 + 20/100 + 10/100 + x/250 =$$

$$1 \quad 0.35 + 0.2 + 0.1 + x/250 =$$

$$1 \quad 0.65 + x/250 =$$

$$1 \quad x/250 =$$

$$0.35 \quad x =$$

$$0.35 * 250 \quad x = 87.5$$

Maximum val of x is 87.5