

Ydner Dimas Pratomo

No

Date

A112021.13254 - A11.4420

Latihan Pengaturan Proses 2

Process	Burst Time	Arrival Time	Priority	Arrival Time
P1	6	0	3	
P2	4	1	4	4
P3	3	3	1	
P4	8	6	2	

Algoritma FIFO

Gantt Chart

P1	P2	P3	P4	
0	6	10	13	21

AWT

$$\begin{aligned} W\bar{T} &= (0-0) + (6-1) + (10-3) + (13-6) \\ &= 0 + 5 + 7 + 7 \\ &= 19 \end{aligned}$$

$$\begin{aligned} AW\bar{T} &= 19 : 4 \\ &= 4,75 \end{aligned}$$

ATA

$$\begin{aligned} T\bar{A}\bar{T} &= (6-0) + (10-1) + (13-3) + (21-6) \\ &= 6 + 9 + 10 + 15 \\ &= 40 \end{aligned}$$

$$\begin{aligned} A\bar{T}\bar{A}\bar{T} &= 40 : 4 \\ &= 10 \end{aligned}$$

Algoritma RR

Gantt Chart

P1	P2	P3	P4	P1	P4	
0	4	8	11	15	17	21

AWI

$$WI = (10-0) + (15-4) + (4-1) + (8-3) + (11-6) + (17-15) \\ = 11 + 3 + 5 + 7 \\ = 26$$

$$AWI = 26 : 4 \\ = 6,5$$

ATAI

$$TAI = (17-0) + (8-1) + (11-3) + (21-6) \\ = 17 + 7 + 8 + 15 \\ = 47$$

$$ATAI = 47 : 4 \\ = 11,75$$

Algoritma SJF

Gantt Chart

P1	P2	P3	P4	
0	6	9	13	21

AWI

$$WI = (0-0) + (9-1) + (6-3) + (13-6) \\ = 0 + 8 + 3 + 7 \\ = 18$$

$$AWI = 18 : 4 \\ = 4,5$$

ATAI

$$TAI = (6-0) + (13-1) + (9-3) + (21-6) \\ = 6 + 12 + 6 + 15 \\ = 39$$

$$ATAI = 39 : 4 \\ = 9,75$$

Algoritma PSJF

Gantt Chart

P1	P2	P3	P1	P4	
0	1	5	8	13	21

AWT

$$WT = (10-0) + (8-1) + (1-1) + (5-3) + (13-6)$$

$$= 7 + 0 + 2 + 7$$

$$= 16$$

$$AWT = 16 : 4$$

$$= 4$$

ATA

$$TA = (13-0) + (5-1) + (8-3) + (21-6)$$

$$= 13 + 4 + 5 + 15$$

$$= 37$$

$$ATA = 37 : 4$$

$$= 9.25$$

Algoritma P5

Gantt Chart

P1	P2	P3	P1	P2	
0	3	6	14	17	21

AWT

$$WT = (10-0) + (14-3) + (17-1) + (3-3) + (6-6)$$

$$= 11 + 16 + 0 + 0$$

$$= 27$$

$$AWT = 27 : 4$$

$$= 6.75$$

ATA

$$TA = (17-0) + (21-1) + (6-3) + (14-6)$$

$$= 17 + 20 + 3 + 8$$

$$= 48$$

$$A \uparrow A \uparrow = 48 : 4 \\ = 12$$

Algoritmo HIRN

P1	P2	P3	P4	
0	6	10	13	21

I

$$P2 = \frac{(6-1)+4}{4} = 2,25$$

$$P3 = \frac{(6-3)+3}{3} = 2$$

$$P4 = \frac{(6-6)+8}{8} = 1$$

II

$$P3 = \frac{(10-3)+3}{3} = 3,33$$

$$P4 = \frac{(10-6)+8}{8} = 1,5$$

AWT

$$WT = (0-0) + (6-1) + (10-3) + (13-6) \\ = 0 + 5 + 7 + 7 \\ = 19$$

$$AWT = 19 : 4 \\ = 4,75$$

A₁A₁

$$A \uparrow = (6-0) + (10-1) + (13-3) + (21-6) \\ = 6 + 9 + 10 + 15 \\ = 40$$

$$A \uparrow A \uparrow = 40 : 4 \\ = 10$$