

TA_practice(助教加分- Scheduling)

練習題如下:

Scheduling

Process	arrival Time	Burst Time	Priority
P1	0	7	3
P2	2	1	1
P3	4	4	4
P4	6	8	5
P5	8	5	2

請使用 **FCFS**、**SJF**、**SRTF**、**Priority** 計算下列的 **Average Turnaround time**、**Average Waiting time**

要求:

- A. 請標註題號**
- B. 每題請附上 Gantt Chart、Average Turnaround time、Average Waiting time**
- C. 共四題**
- D. 可以放上截圖照片在 word 上 (但請保持文字與圖像的可辨識性為限)**
- E. 請繳交 word 檔 (檔名為: s+學號.docx)**

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請使用 FCFS、SJF、SRTF、Priority 計算下列的 Average Turnaround time、Average Waiting time

Turnaround Time (TAT, 周轉時間)

$$TAT = CT - AT$$

Waiting Time (WT, 等待時間)

$$WT = TAT - BT$$

Response Time (RT, 響應時間)

$$RT = TAT - AT$$

FCFS

P1	P2	P3	P4	P5
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0 7 8 12 20 25

$$ATAT: [(7-0) + (8-2) + (12-4) + (20-6) + (25-8)]/5 = 52/5 = 10.4 \text{ ms}$$

$$AWT: [52 - (7+1+4+8+5)]/5 = 5.4 \text{ ms}$$

SRTF

P1	P2	P1	P3	P5	P4
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0 2 3 8 12 17 25

$$ATAT: [(8-0) + (3-2) + (12-4) + (25-6) + (17-8)]/5 = 45/5 = 9 \text{ ms}$$

$$AWT: [45 - (7+1+4+8+5)]/5 = 20/5 = 4 \text{ ms}$$

SJF

P1	P2	P3	P5	P4
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0 7 8 12 17 25

$$ATAT: [(7-0) + (8-2) + (12-4) + (17-8) + (25-6)]/5 = 49/5 = 9.8 \text{ ms}$$

$$AWT: [49 - (7+1+4+8+5)]/5 = 24/5 = 4.8 \text{ ms}$$

Priority

P1	P2	P1	P5	P3	P4
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0 2 3 8 13 17 25

$$ATAT: [(8-0) + (3-2) + (17-4) + (25-6) + (13-8)]/5 = 46/5 = 9.2 \text{ ms}$$

$$AWT: [46 - (7+1+4+8+5)]/5 = 21/5 = 4.2 \text{ ms}$$