

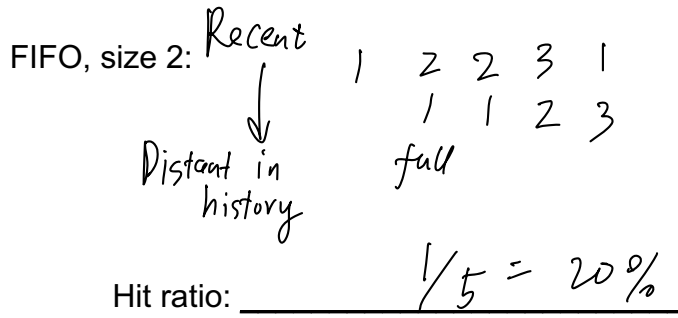
Z/o access timeline

DS5110 Caching Policy Worksheet

Problem 1

Data. Hit?

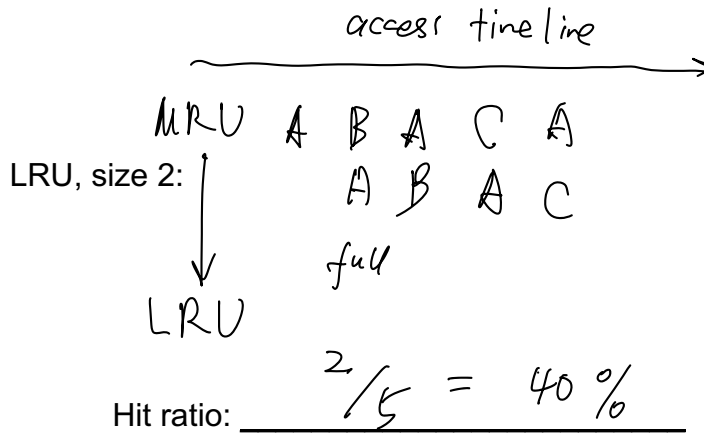
- 1
- 2
- 1
- 3
- 1



Problem 2

Data. Hit?

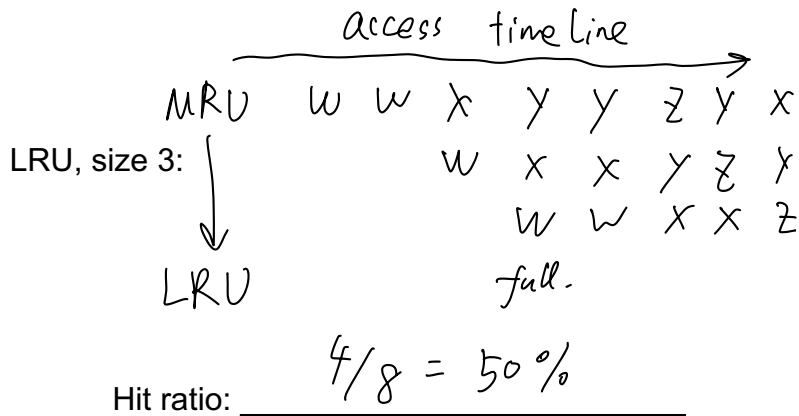
- A
- B
- A
- C
- A



Problem 3

Data. Hit?

- W
- W
- X
- Y
- Y
- Z
- Y
- X



Miss latency: 20 ms

Hit latency: 0.1 ms

Average latency: $= \frac{\text{Hit Ratio} \times \text{Hit Latency} + \text{Miss Ratio} \times \text{Miss Latency}}{\text{Hit Ratio} + \text{Miss Ratio}}$

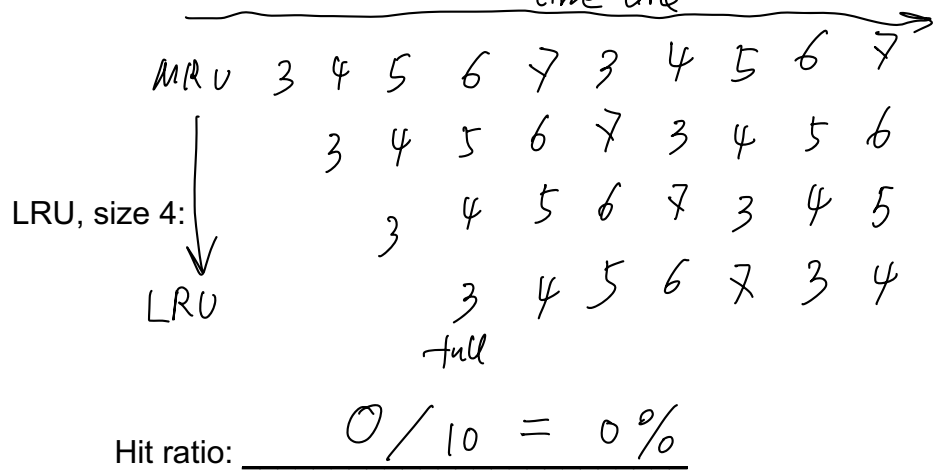
$$= 50\% \times 0.1 \text{ ms} + 50\% \times 20 \text{ ms}$$

$$= 10.05 \text{ ms}$$

Problem 4

Data. Hit?

- 3 X
- 4 X
- 5 Y
- 6 X
- 7 X
- 3 X
- 4 X
- 5 X
- 6 X
- 7 X



Problem 5

Data. Hit?

- 3 X
- 4 X
- 5 X
- 6 X
- 7 X
- 3 ✓
- 4 ✓
- 5 ✓
- 6 ✓
- 7 ✓

