Kaleb Cosgrave

Homework # 4 due Thursday December 8th, 2022

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Exercises: 8.5, 8.6

8.4

Consider the following string of page references:

7, 0, 1,2,0,3,0,4,2,3,0,3,2

Complete a figure similar to Figure 8.14,

showing the frame allocation for:

1. FIFO

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7 | 0 | 1 | 2 | 0 | 3 | 0 | 4 | 2 | 3 | 0 | 3 | 2 | 7/13= 54% |
| PF1 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 0 | 0 | 0 |
| PF2 |  | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
| PF3 |  |  | 1 | 1 | 1 | 1 | 0 | 0 | 0 | 3 | 3 | 3 | 3 |
|  | M | M | M | F | H | F | F | F | F | F | F | H | H | 7pf |

Total Misses: 10/13

Total Hits: 3/13

1. LRU

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | 7 | 0 | 1 | 2 | 0 | 3 | 0 | 4 | 2 | 3 | 0 | 3 | 2 | 6/13=46% |
| PF1 | 7 | 7 | 7 | 2 | 2 | 2 | 2 | 4 | 4 | 4 | 0 | 0 | 0 |
| PF2 |  | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 3 | 3 | 3 | 3 |
| PF3 |  |  | 1 | 1 | 1 | 3 | 3 | 3 | 2 | 2 | 2 | 2 | 2 |
|  | M | M | M | F | H | F | H | F | F | F | F | H | H | 6 PF |

Total Misses: 9/13

Total Hits: 4/13

8.5

3

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | A | B | E | A | B | C | D | E |
| PF1 | A | A | A | D | D | D | E | E | E | E | E | E |
| PF2 |  | B | B | B | A | A | A | A | A | C | C | C |
| PF3 |  |  | C | C | C | B | B | B | B | B | D | D |
|  | M | M | M | M | M | M | M | H | H | M | M | H |

Total Misses: 9/12

Total Hits: 3/12

4

|  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | A | B | C | D | A | B | E | A | B | C | D | E |
| PF1 | A | A | A | A | A | A | E | E | E | E | D | D |
| PF2 |  | B | B | B | B | B | B | A | A | A | A | E |
| PF3 |  |  | C | C | C | C | C | C | B | B | B | B |
| PF4 |  |  |  | D | D | D | D | D | D | C | C | C |
|  | M | M | M | M | H | H | M | M | M | M | M | M |

Total Misses: 10/12

Total Hits: 2/12