

Quiz 30 Apr

Wednesday, April 30, 2025 12:34 PM

2. Consider a system with 3 physical frames of memory that is given the following page memory reference sequence: 4, 2, 3, 0, 2, 1, 2, 3, 0, 1, 2, 1. What is the number of page faults that would occur for each of the following page replacement algorithms? (12 pts in total, 4 pts each)

(a) Optimal page replacement algorithm

6

(b) FIFO 10

(c) LRU 9

4	2	3	0	2	1	2	3	0	1	2	1
4	4	4	0	0	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	0	0	0	0
F	F	F	F	H	F	H	H	F	H	H	H

4	2	3	0	2	1	2	3	0	1	2	1
4	4	4	0	0	1	1	1	1	1	1	1
2	2	2	2	2	2	2	2	2	2	2	2
3	3	3	3	3	3	3	3	0	0	0	0
F	F	F	H	F	H	H	F	H	H	H	H

4	2	3	0	2	1	2	3	0	1	2	1
4	4	4	0	0	6	0	3	3	3	2	2
2	2	2	2	2	1	1	1	0	0	0	0
3	3	3	3	2	2	2	1	1	1	1	1
F	F	F	H	F	F	F	F	F	F	F	H