Question 1 — 1 / 1 point

Given a cache of size 3 and a sequence of page requests {4, 1, 2, 5, 4, 3, 4, 1, 5, 4}, Please choose the number of cache ``misses" for Algorithm FIFO .

- ○ 6
- ○ 7
- ○ 8
- ☑ 9
- ○ 10

4 4 4 5 5 5 1 1 1
1 1 1 4 4 4 5 5
2 2 2 3 3 3 4

Question 2 — 1 / 1 point

Given a cache of size 3 and a sequence of page requests {4, 1, 2, 5, 4, 3, 4, 1, 5, 4}, Please choose the number of cache ``misses" for Algorithm LRU.

- ○ 6
- ○ 7
- ☑ 8
- ○ 9
- ○ 10

4 4 4 5 5 5 1 1
1 1 1 4 4 4 4
2 2 2 3 3 5

Question 3 — 1 / 1 point

Given a cache of size 3 and a sequence of page requests {4, 1, 2, 5, 4, 3, 4,

Question 3 — 1 / 1 point

Given a cache of size 3 and a sequence of page requests {4, 1, 2, 5, 4, 3, 4, 1, 5, 4}, Please choose the number of cache ``misses'' for Algorithm LFU. (If there are multiple pages have the same frequency, then follow the algorithm FIFO for this request)

- ○ 6
- ○ 7
- ✓ 8
- ○ 9
- ○ 10

4 4 4 5 5 5 1 1
1 1 1 4 4 4 4
2 2 2 3 3 5

Question 4 — 1 / 1 point

Given a cache of size 3 and a sequence of page requests {4, 1, 2, 5, 4, 3, 4, 1, 5, 4}, Please choose the number of cache ``misses'' for Algorithm LIFO.

- ✓ 6
- ○ 7
- ○ 8
- ○ 9
- ○ 10

4 4 4 4 4 4
1 1 1 1 1
2 5 3 5

Question 5 — 1 / 1 point

Question 5 — 1 / 1 point

Given a cache of size 3 and a sequence of page requests {4, 1, 2, 5, 4, 3, 4, 1, 5, 4}, Please choose the number of cache ``misses" for Algorithm FF (Furthest in Future).

- [x] 6
- [ ] 7
- [ ] 8
- [ ] 9
- [ ] 10

4 4 4 4 4 4
1 1 1 1 5
2 5 3 3

Question 6 — 1 / 1 point

What is a Priority Queue?

- [ ] A queue where elements are dequeued in the order they were added.
- [x] A data structure where each element has a priority, and elements with higher priority are dequeued before those with lower priority.
- [ ] A data structure where items are inserted in the order they are received.
- [ ] A data structure where the smallest item is always dequeued first.