A process has 4 frames in memory it can use and 5 pages of virtual memory. Using demand paging and the following page replacement algorithms show what pages will be replaced and the number of pages faults.

Use the following page reference string: 1, 2, 3, 4, 1, 4, 5, 1, 2, 1, 2, 3, 4, 5

- a. First-In-First-Out
- b. Least Recently Used
- c. optimal