Write a program for the LRU page replacement algorithm.

Inputs: Page Reference String – 7 0 1 2 0 3 2 3 04

Pages frames: 3

Initially, all page frames are empty.

Output format:

**Page Reference Hit/miss Page frame status**

7 Miss 7-empty-empty

0 Miss 7-0-empty

1 Miss 7-0-1

2 Miss 2-0-1

0 Hit

3 Miss 2-0-3

2 Hit

3 Hit

0 Hit

4 Miss 4-0-3

Also, print the total number of page faults.

Consider an input data set and show how the increase in page frames affects the number of page faults.