

9.8 : Consider the following page reference string:

1,2,3,4,2,1,5,6,2,1,2,3,7,6,3,2,1,2,3,6

How many page faults would occur for the following replacement algorithms, assuming one, two , three, four, five, six, seven frames? Remember that all frames are initially empty, so your first unique pages will cost one fault each.

	1	2	3	4	5	6	7
LRU	20	15	15	10	8	7	7
FIFO	20	18	16	15	10	10	7
Optimal	20	15	11	8	7	7	7

1	2	3	7	5	6
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12.16: Suppose that a disk drive has 5,000 cylinders, numbered 0 to 4999. The drive is currently serving a request at cylinder 143, and the previous request was at cylinder 125. The queue of pending requests, in FIFO order is: 86,1470,913,1774,948,1509,1022,1750,130

Starting from the current head position, what is the total distance(in cylinders) that the disk arm moves to satisfy all the pending requests for each of the following disk-scheduling algorithms.

- FCFS = 7082  
125->143->86->1470->913->1774->948->1509->1022->1750->130
- SSTF = 1761  
125->143->130->86->913->948->1022->1470->1509->1750->1774
- SCAN = 9809  
125->143->913->948->1022->1470->1509->1750->1774->4999->130->86
- LOOK = 3335  
125->143->913->948->1022->1470->1509->1750->1774->130->86
- C-SCAN = 10025  
125->143->913->948->1022->1470->1509->1750->1774->4999->0->86->130
- C-LOOK = 3423  
125->143->913->948->1022->1470->1509->1750->1774->86->130