Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

Consider the following page reference string:
1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:
a) FIFO
b) LRU

a) FIFO (First In First Out) algorithm:

Using the FIFO algorithm with four frames and the given page reference string, the page faults occur as follows:

Page	Frame 0	Frame 1	Frame 2	Frame 3	Page Fault?
1	1				Yes
2	1	2			Yes
3	1	2	3		Yes
4	1	2	3	4	Yes
5	5	2	3	4	Yes
3	5	2	3	4	No
4	5	2	3	4	No
1	5	2	3	4	No
2	5	2	3	4	No
7	5	7	3	4	Yes
8	5	7	8	4	Yes

EasyExamNotes.com Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

Page	Frame 0	Frame 1	Frame 2	Frame 3	Page Fault?
7	5	7	8	4	No
8	5	7	8	4	No
9	5	7	8	9	Yes
7	5	7	8	9	No
8	5	7	8	9	No
9	5	7	8	9	No
5	5	7	8	9	No
4	5	4	8	9	Yes
5	5	4	8	9	No

Therefore, the total number of page faults is 9.

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b) LRU (Least Recently Used) algorithm:

Using the LRU algorithm with four frames and the given page reference string, the page faults occur as follows:

Page	Frame 0	Frame 1	Frame 2	Frame 3	Page Fault?
1	1				Yes

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Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

Page	Frame 0	Frame 1	Frame 2	Frame 3	Page Fault?
2	1	2			Yes
3	1	2	3		Yes
4	1	2	3	4	Yes
5	5	2	3	4	Yes
3	5	2	3	4	No
4	5	2	3	4	No
1	1	2	3	4	Yes
2	1	2	3	4	No
7	1	2	7	4	Yes
8	1	2	7	8	Yes
7	1	2	7	8	No
8	1	2	7	8	No
9	1	2	7	9	Yes
7	1	2	7	9	No
8	1	2	8	9	Yes
9	1	2	8	9	No
5	1	2	5	9	Yes
4	1	2	5	4	Yes
5	1	2	5	4	No

EasyExamNotes.com Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

Therefore, the total number of page faults is 10.

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Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

52. Program to print string in reverse order
53. Program to implement while loop in Linux
54. Program to implement for loop using sequence keyword in Liux
55. Program to implement different types of increment in Linux
56. For loop without in keyword in Linux
57. Program to implement for loop using in keyword in Linux
58. Multiple Processor Scheduling
59. What do you mean by Virtual Memory? Write down its advantages?
60. Compare Paging and Segmentation?
61. What is Process Scheduling, CPU Scheduling, Disk Scheduling? Explain Short, Medium and Long term Scheduler?
62. Explain concept of a process with its components ?
63. Explain the following in brief Contiguous and Linked list allocation for implementing file system?
64. Explain various Disk scheduling algorithms with Illustrations ?
65. Define process and thread. What is PCB ? Explain its various entries with their usefulness ?
66. Discuss advantages and disadvantages of the Buffer cache ?
67. Explain different types of OS with examples of each ?
68. What is an Operating System? Write down its desirable characteristics ?
69. Define a deadlock ? Write down the conditions responsible for deadlock? How can we recover from deadlock ?
70. What are the various services provided by Operating system ?
71. What do you mean by PCB? Where is it used? What are its contents? Explain.
72. What is Binary and Counting semaphores ?
73. What is File? What are the different File attribute and operations?
74. What are System call? Explain briefly about various types of system call provided by

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Consider the following page reference string:1,2,3,4,5,3,4,1,2,7,8,7,8,9,7,8,9,5,4,5. How many page faults would occur for the following replacement algorithm, assuming four frames:a) FIFOb) LRU

an Operating System?

75. Describe necessary conditions for deadlocks situation to arise.
76. What are points to be consider in file system design? Explain linked list allocation in detail?
77. Write a Semaphore solution for dining Philosopher’s problem?
78. Explain CPU schedulers in operating system?
79. Write the different state of a process with the help of Process state deagram?
80. What is Mutex in operating system?
81. Explain Network operating system?
82. What do you mean by paging in operating system ?

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