

CSCD 340

Lab 11

Your answers will be in the form of a PDF code named lastname first name lab 11.PDF. You provide the page replacement algorithm before the answer. NOTE: If you don't state the algorithm then 0 points.

Consider a demand-paging system in which a process is allocated four frames. Let the sequence of page references for the process be as follows: 1, 3, 4, 1, 5, 2, 3, 8, 6, 7, 10, 3, 9, 4, 8, 3, 4, 1, 9, 5, 2, 1, 1, 3, 5, 1, 5, 1, 3, 2, 3, 1, 2, 7, 4, 2, 4, 2, 5, 2, 4, 6.

At the end of processing the above sequence of references

- Determine the set of pages resident in memory
- Determine the total number of page faults for each of the above four processes using the following page-replacement algorithms
 - FIFO
 - LRU time counter
 - LRU stack
 - Stu's second chance
 - Let the Clock page-replacement scheme be employed. As pages 1, 3, 4, 1, 5 are placed after 5 is placed then the clock will be point to page 1. As the page is placed the referenced bit is set.

TO TURN IN

Submit a single PDF containing your answers for each algorithm per the specifications. Include in that PDF a 2 paragraphs analysis of the algorithms as it relates to handling page faults, meaning clearly compare/contrast each algorithm.

For this analysis I don't want to know how the algorithms work, what I want to know is if one algorithm had more or less faults and why you think that is. Also include a comment on Belady's Anomaly.

NOTE: I don't care if you type it or handwrite it. The PDF needs to be less than 1 MB if you hand write it and scan it.

You will want to show your work in the PDF. If you just submit answers without work, and the answers are wrong, then you will receive 0 points for that algorithm.