Ryan Chappelle

Lab 7 Report

Table 1: Shows the miss rate of a text file including 10000 page numbers, using different page replacement algorithms.

|  |  |  |  |
| --- | --- | --- | --- |
|  | FIFO | LRU | Second Chance |
| Size = 10 | 98.8% | 99.12% | 98.82% |
| Size = 50 | 94.8% | 95.48% | 94.83% |
| Size = 100 | 89.53% | 90.49% | 89.65% |
| Size = 250 | 75.19% | 75.48% | 75.15% |
| Size = 500 | 52.2% | 52.00% | 52.41% |

A picture containing text, screenshot, colorfulness, diagram

Description automatically generated

As we can see in the above table and graph, LRU seems to have the highest miss rate in all cases except for when the cache size is 500, which it has the lowest. FIFO seems to have the lowest miss rate on average, however when the cache size grows to 250 it is no longer the best. However, all three algorithms follow the same trend and are acceptable methods.