

Task4

When I change the number of physical frames from 20 to 50 for the four algorithms, the following happens:

1. The FIFO replacement algorithm goes from a 78.70% fault rate with 1574 faults to a 48.25% fault rate with 965 faults.
2. The LRU replacement algorithm goes from a 77.90% fault rate with 1558 faults to a 48.10% fault rate with 962 faults.
3. The Second Chance replacement algorithm goes from a 78.00% fault rate with 1560 faults to a 48.65% fault rate with 973 faults.
4. The Enhanced Second Chance replacement algorithm goes from a 78.00% fault rate with 1560 faults and 874 writes to a 48.65% fault rate with 973 faults and 632 writes. I'm not sure if the writes are supposed to change.

Overall, each algorithm performs better (has a lower % page fault rate and lower total faults) when the number of physical frames increases. It doesn't necessarily decrease these numbers by more than half, though, even though the number of frames was increased by over double.