CSC 345 Project 1

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Section: 01

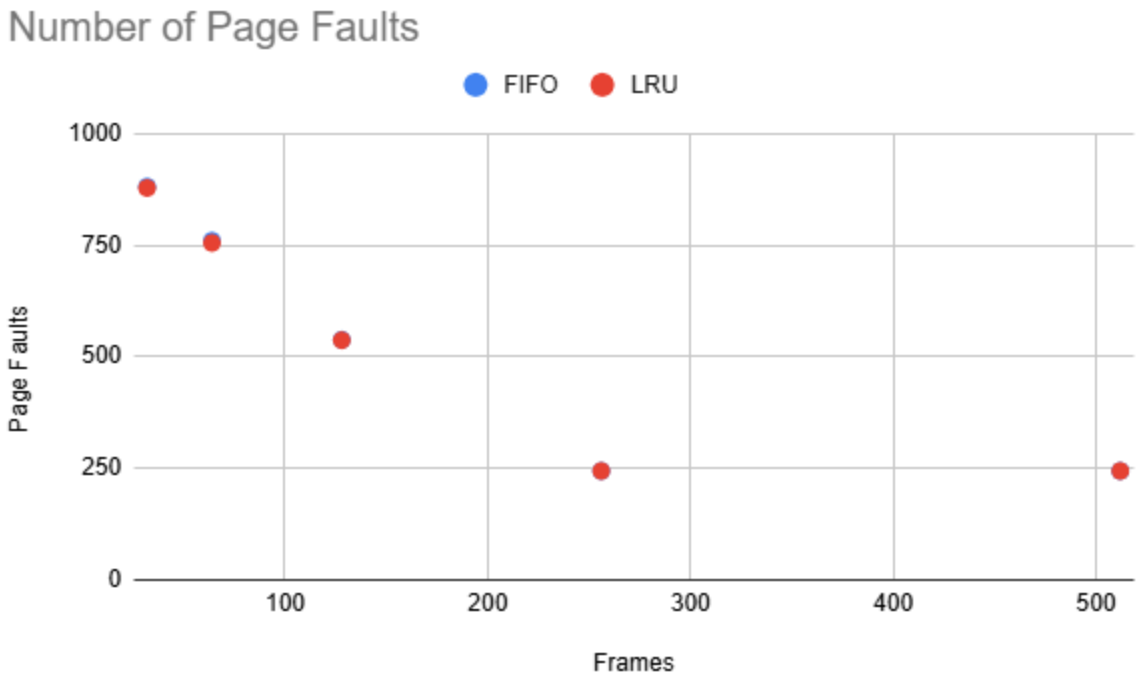
Implementations:

- Correctly read in input logical addresses.✅
- Correctly translated the input addresses into physical addresses.✅
- Correctly retrieved the values stored in the physical addresses.✅
- Implemented FIFO-based TLB update. (main1)✅
- Correctly counted number of page faults✅
- Correctly counted number of TLB hits.✅
- Implemented FIFO-based page replacement algorithm. This should include TLB update implementation from the above. (main2)✅
- Implemented LRU-based page replacement algorithm. This should include TLB update implementation from the above. (main3)✅
- Try different number of frames. Start with 32, double up each time, up to 512. That is, 32, 64, 128, 256, 512, 768, 1024. Record absolute number of page faults and the page fault rate for these five cases. In your report.pdf, include the plot showing the trend.

Also include your analysis of the result. Particularly, compare FIFO and LRU page replacement algorithm performance

Analysis

Both algorithms gave similar results throughout the experiment. LRU had a slightly lower number of page faults, between 1-5 difference, until 256 frames where both algorithms gave the same results.



The page fault rate shows a similar graph since it's just # of PF / 1000.