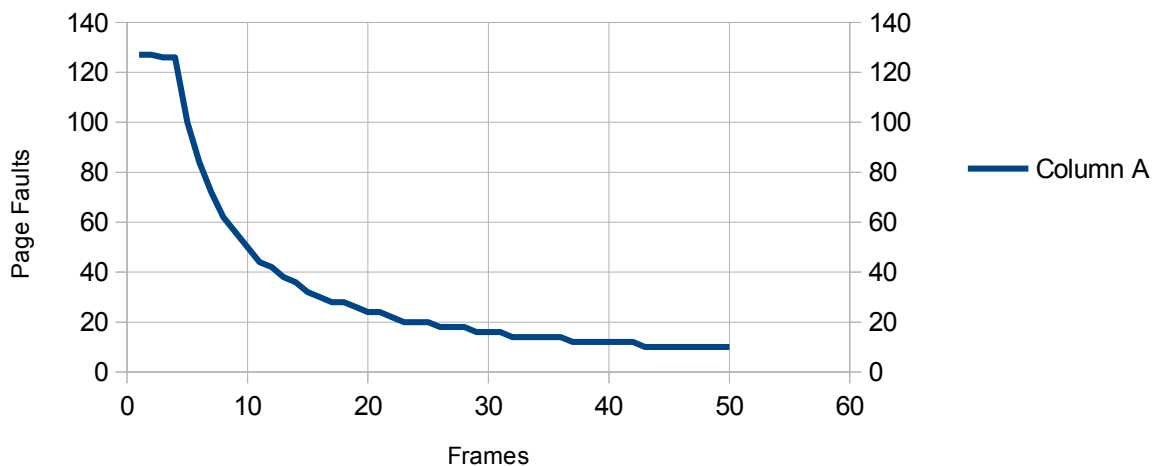


Homework #6

For this program, I first had to make sure that I was generating a random number every time in order to simulate a random access of memory. I then made sure to align that random number within the correct range for the values I'd provided the code. Once I'd ensured that all random numbers generated would fall within the scope of the memory allocation, the next step was to find which frame out of a possible 16 it corresponded with. Using some math, I was able to figure out which frame that specific memory call corresponded to. From there, we needed to find how many page faults were associated with that frame: the number of hits that matched with that frame would be the number of faults we would get. I would keep repeating this process until I had exhausted all possible frames, and would eventually find that the number of faults would dramatically decrease as I used more and more frames.

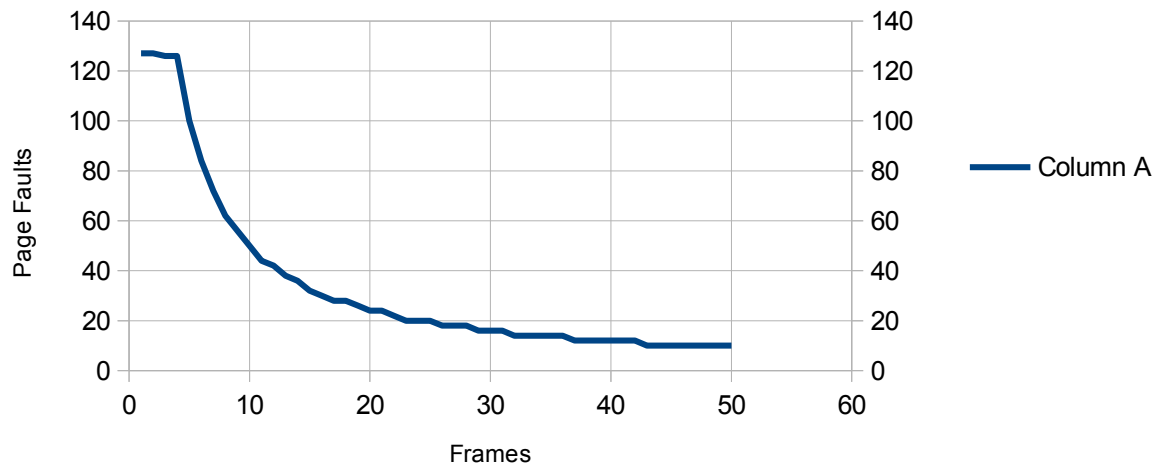
Page Size: 4KB, Log. Mem. Size: 64KB, 1 Frame

FIFO Algorithm



Page Size: 4KB, Log. Mem. Size: 64KB, 1 Frame

LRU Algorithm



I found both graphs to be the same, even given the different algorithm types. As far as I could tell, Belamy's anomaly did not occur, as I got fewer page faults with more frames added.