Team Meatball
CS 149
Spring 2015

Assignment 4 Report

For the swapping portion, we found that the algorithms don't make too much of a difference in number of processes that get to run:

Number of Processes Swapped:
First Fit: 96.8
Next Fit: 95.8
Best Fit: 98.0
Worst Fit: 95.2

As expected, first fit performed better than next fit. Best fit worked the best, leaving us to believe that there must have been a lot of "perfect" fits, which is not surprising, considering there were a lot of processes that have the exact same size.

For the paging portion, we got the following results:
Hit Ratios:
Random Pick: 0.53
FIFO: 0.504
LFU: 0.538
MFU: 0.496
LRU: 0.518

Most frequently used performed poorly, which makes sense. It's likely that a page that is used frequently will get referenced again, because of the locality conditions. Therefore, removing it seems like a bad idea. FIFO performed the best, which makes sense. The most recent page is one of the three most likely to be referenced again. The oldest page is likely to be furthest from the current page, making it the most useless. Random pick did disappointingly well.