

### Paging

- First in first out: FIFO performed the best. We believe this is because it takes the best advantage of the locality of data references. Its page hit rate in our runs was 0.468
- Least recently used: LRU was the second best. This solid performance is also the result of being very effective in taking advantage of locality data. Page hit rate: 0.456
- Least frequently used: LFU did the worst of all algorithms. This was surprising because it seems to be a solid algorithm in theory. Page hit rate: 0.394
- Most frequently used: MFU would seem like a poor idea of an algorithm to choose, but it had a mid pack performance with a page hit rate of 0.446
- Random pick: Unsurprisingly, random pick wasn't that great of an algorithm for page swaps. It was still stronger than LFU, but not as good as any other algorithm. Page hit rate: 0.434

### Swapping

- First fit: First fit served as an effective algorithm for choosing which hole to fill with a process. For a very simple and quick algorithm, it does the job well enough to fill memory without having incredibly large gaps. Average swaps: 38.4
- Next fit: Next fit worked better than first fit for all intents and purposes. This is surprising since they are basically the same algorithm with different starting points. However, it may be explained by the large holes clearing up in a circular pattern, which then are able to be filled in the same circular pattern, whereas First Fit's placement of processes has a bias towards the front. Average swaps: 46
- Best fit: Best fit worked extraordinarily well when the process sizes we were generating were all even powers of 2. This is because the main drawback of best fit, which is that tiny holes can be left open in memory that pretty much no process is going to be small enough to fit in, doesn't happen when any open hole size can be created by a sum of various process sizes. When we changed the size of holes to be the relatively prime numbers, however, the issue did manifest and shows its big weakness. It was still slightly more effective than first fit, though. Average swaps: 39.4