CSC369 Assignment 2 - Page Tables and Replacement Algorithms

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1 Introduction

For this assignment, we're going back to the realm of user mode programming. Specifically, you will have to simulate the operation of page tables and page replacement. As I keep saying: the way to gain a solid understanding of the theory is by applying it in practice.

You have two tasks in this assignment, which will be based on a virtual memory simulator. The first task is to implement virtual-to-physical address translation and hidemand paging using a two-level page table. The second task is to implement four different page replacement algorithms: FIFO, Clock, exact LRU, and OPT.

Before you start work, you should complete the set of readings about memory, if you haven't done so already: link