

Assignment 3 Report

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Brief 1 page (A4) report (worth 10%) of how you tested your program and a comparison of the page replacement methods based on the results from your program and any interesting observations. Specifically, your report should include discussion on edge cases you considered and behaviour of your algorithm on those cases, any specific trick/technique you applied and did you face any specific issue.

Introduction:

In assignment 3 I made a program that simulated a system using paging with limited virtual memory which was used to calculate turn around time and fault times in a first in first out algorithm using Fixed local replacement and another first in first out algorithm using Variable global replacement.

Testing Methodology:

The algorithms were tested using text files which were simulated as processes in the program. It took input from the file then ran it through both algorithms then gave an output for each.

Comparison of Page Replacement Methods and Results:

In the given cases to test, my algorithms were correct to the specification given and the right result was given in the output of the program.

Edge Cases, Behaviours, and Issues:

In some edge case sample input files that were used, my algorithms behaved mostly fine but at some point, it was slightly above the correct output results.

Conclusion:

This assignment was to simulate a system which does not have infinite memory and uses paging and virtual memory which also deals with page fault handling and scheduling while putting input through FIFO with fixed allocation and local page replacement and FIFO with variable allocation and global page replacement. I believe I have completed the algorithms correctly which are making up most of the assignment marks allocated. Each process is correctly completing traversal of the algorithms and paging and virtual memory and outputting correctly to command line.