General

Projects and its respective folders are listed below. Detailed information about each project can be found in their respective folders.

Problem 10.44

The task requires implementing three page replacement algorithms: FIFO (First-In-First-Out), LRU (Least Recently Used), and Optimal (OPT). You need to generate a random page-reference string and then apply each algorithm to this string, recording the number of page faults.

Solution

folder: `page_replacement`

Problem 11.27

The task requires implementing three disk-scheduling algorithms: FCFS (First-Come, First-Served), SCAN, and C-SCAN. You need to generate a random series of 1,000 cylinder requests and service them according to each algorithm, then report the total amount of head movement required by each algorithm.

Solution

folder: `disk_scheduling`