) Fifo.c

#include <stdio.h>

int main() {

// Hardcoded reference string and number of frames

int pages[] = {7, 0, 1, 2, 0, 3, 0, 4};

int n = 8; // Number of pages

int frames = 3; // Number of memory frames

int memory[3] = {-1, -1, -1}; // Initialize memory to -1 (empty)

int front = 0; // Points to the oldest page

int pageFaults = 0;

for (int i = 0; i < n; i++) {

int found = 0;

// Check if the page is already in memory

for (int j = 0; j < frames; j++) {

if (memory[j] == pages[i]) {

found = 1; // Page hit

break;

}

}

// If page is not in memory, replace the oldest page

if (!found) {

memory[front] = pages[i];

front = (front + 1) % frames; // Move to the next oldest frame

pageFaults++;

}

}

printf("Total Page Faults: %d\n", pageFaults);

return 0;

}

Total Page Faults: 7