

Program:

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#include <iostream>
#include <queue>
using namespace std;

int FIFO(int pages[], int n, int frames) {
    queue<int> q; // Queue to store pages in memory
    int pageFaults = 0; // Counter for page faults

    for (int i = 0; i < n; i++) {
        // Check if the page is already in memory
        bool found = false;
        queue<int> temp = q;
        while (!temp.empty()) {
            if (temp.front() == pages[i]) {
                found = true;
                break;
            }
            temp.pop();
        }

        // If page is not in memory, replace the oldest page
        if (!found) {
            if (q.size() == frames) {
                q.pop(); // Remove the oldest page
            }
            q.push(pages[i]); // Add the new page
            pageFaults++; // Increment page fault counter
        }
    }
}
```

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        return pageFaults;
    }

int main() {
    int n, frames;

    cout << "Enter the number of pages: ";
    cin >> n;

    int pages[n];
    cout << "Enter the page reference string: ";
    for (int i = 0; i < n; i++) {
        cin >> pages[i];
    }

    cout << "Enter the number of frames: ";
    cin >> frames;

    int pageFaults = FIFO(pages, n, frames);
    cout << "Total Page Faults: " << pageFaults << endl;

    return 0;
}

```

Output:

Enter the number of pages: 20

Enter the page reference string: 7 0 1 2 0 3 0 4 2 3 0 3 2 1 2 0 1 7 0 1

Enter the number of frames: 3

Total Page Faults: 15

Conclusion: First In First Out Page Replacement Algorithm program was implemented

successfully.