```
#include <stdio.h>
#include <stdlib.h>

#define MAX_FRAMES 3
#define MAX_PAGES 10

int frames[MAX_FRAMES];
int pages[MAX_PAGES];
int page_faults = 0;
int frame_index = 0;

void initializeFrames() {
    for (int i = 0; i < MAX_FRAMES; i++) {
        frames[i] = -1;
    }
}

void displayFrames() {
    printf("Current Frames: ");
    for (int i = 0; i < MAX_FRAMES; i++) {
        if (frames[i] != -1) {
            printf("%d ", frames[i]);
        }
    }
    printf("\n");
}

int isPageInMemory(int page) {
    for (int i = 0; i < MAX_FRAMES; i++) {
        if (frames[i] == page) {
            return 1;
```

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        }
    }
    return 0;
}

int replacePage() {
    frame_index = (frame_index + 1) % MAX_FRAMES;
    return frame_index;
}

void simulateFIFO() {
    initializeFrames();

    for (int i = 0; i < MAX_PAGES; i++) {
        printf("\nAccess Page %d: ", pages[i]);

        if (!isPageInMemory(pages[i])) {
            frames[frame_index] = pages[i];
            page_faults++;
            displayFrames();
            frame_index = replacePage();
        } else {
            printf("Page already in memory\n");
            displayFrames();
        }
    }
}

int main() {
    for (int i = 0; i < MAX_PAGES; i++) {
        pages[i] = rand() % 5; // Randomly generate page numbers from 0 to 4
```

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    }

    printf("Simulating FIFO Page Replacement Algorithm\n");
    simulateFIFO();
    printf("\nTotal Page Faults: %d\n", page_faults);

    return 0;
}
```