



C Online
Compiler

Programiz
PRO

```
main.c
1 #include <stdio.h>
2 #define FRAME_COUNT 3
3
4 int is_page_in_memory(int frames[], int page,
    int frame_count) {
5     for (int i = 0; i < frame_count; i++) {
6         if (frames[i] == page) {
7             return i;
8         }
9     }
10    return -1;
11 }
12
13 void lru_page_replacement(int pages[], int
    page_count) {
14     int frames[FRAME_COUNT] = {-1, -1, -1};
15     int last_used[FRAME_COUNT] = {0, 0, 0};
16     int page_faults = 0, time = 0;
```

Output

Clear

Reference 7: Frames: 7
Reference 0: Frames: 7 0
Reference 1: Frames: 7 0 1
Reference 2: Frames: 2 0 1
Reference 0: Frames: 2 0 1
Reference 3: Frames: 2 0 3
Reference 0: Frames: 0 0 3
Reference 4: Frames: 0 4 3
Reference 2: Frames: 2 4 3
Reference 3: Frames: 2 4 3
Total page faults: 7



main.c

Run

Clear

```
1 #include <stdio.h>
2
3 #define FRAME_COUNT 3 // Number of frames in
    memory
4
5 // Function to check if a page is already in
    memory
6 int is_page_in_memory(int frames[], int page) {
7     for (int i = 0; i < FRAME_COUNT; i++) {
8         if (frames[i] == page) {
9             return 1; // Page found in memory
10        }
11    }
12    return 0; // Page not found
13 }
14
15 // Function to simulate FIFO page replacement
16 void fifo_page_replacement(int pages[], int
```

Output

Reference 7: Frames: 7
Reference 0: Frames: 7 0
Reference 1: Frames: 7 0 1
Reference 2: Frames: 2 0 1
Reference 0: Frames: 2 0 1
Reference 3: Frames: 2 0 3
Reference 0: Frames: 0 0 3
Reference 4: Frames: 4 0 3
Reference 2: Frames: 4 2 3
Reference 3: Frames: 4 2 3
Total page faults: 7