#include <stdio.h>

#define MAX\_FRAMES 10

int main() {

int page\_frames[MAX\_FRAMES];

int num\_frames;

int page\_sequence[] = {7,0,1,2,0,3,0,4,2,3,0,3,2,1,2,0,1,7,0,1};

int num\_pages = sizeof(page\_sequence)/sizeof(page\_sequence[0]);

int i, j, k;

int page\_faults = 0;

printf("Enter the number of page frames: ");

scanf("%d", &num\_frames);

for (i = 0; i < num\_frames; i++) {

page\_frames[i] = -1;

}

for (i = 0; i < num\_pages; i++) {

int page = page\_sequence[i];

int replace\_index = -1;

int replace\_future = -1;

for (j = 0; j < num\_frames; j++) {

if (page\_frames[j] == page) {

break;

}

}

if (j == num\_frames) {

page\_faults++;

for (j = 0; j < num\_frames; j++) {

int future = -1;

for (k = i+1; k < num\_pages; k++) {

if (page\_frames[j] == page\_sequence[k]) {

future = k;

break;

}

}

if (future == -1) {

replace\_index = j;

break;

} else if (future > replace\_future) {

replace\_index = j;

replace\_future = future;

}

}

page\_frames[replace\_index] = page;

}

}

printf("Number of page faults: %d\n", page\_faults);

return 0;

}

OUTPUT

Enter the number of page frames: 4

Number of page faults: 8

--------------------------------

Process exited after 4.006 seconds with return value 0

Press any key to continue . . .