#include <stdlib.h>

#include<stdio.h>

int pagefault(int a[], int frame[], int n, int no) {

int i, j, avail, count = 0, k;

/\* initialize frame with value -1 \*/

for (i = 0; i < no; i++) {

frame[i] = -1;

}

j = 0;

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

avail = 0;

for (k = 0; k < no; k++)

/\* if equal it means page number(reference) is available in frame \*/

if (frame[k] == a[i])

avail = 1;

/\* if avail=0 means page is not available in frame \*/

if (avail == 0) {

frame[j] = a[i];

/\* j will calculate the position at which the new page add \*/

j = (j + 1) % no;

count++; // variable count calculates the total page fault

}

}

return count;

}

void main() {

int n, i, \* a, \* frame, no, fault;

printf("\nENTER THE NUMBER OF PAGES:\n");

scanf("%d", & n);

a = (int \* ) malloc(n \* sizeof(int));

printf("ENTER THE PAGE NUMBER :\n");

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

scanf("%d", & a[i]);

printf("ENTER THE NUMBER OF FRAMES :");

scanf("%d", & no);

frame = (int \* ) malloc(no \* sizeof(int));

fault = pagefault(a, frame, n, no);

printf("Page Fault Is %d", fault);

}

output

ENTER THE NUMBER OF PAGES:

7

ENTER THE PAGE NUMBER :

1 4 0 4 5 3 7

ENTER THE NUMBER OF FRAMES :3

Page Fault Is 6