LRU :

#include<stdio.h>

int findLRU(int time[], int n)

{

int i, minimum = time[0], pos = 0; for (i = 1; i < n; ++i) {

if (time[i] < minimum)

{

minimum = time[i];

pos = i;

}

}

return pos;

}

int main() {

int no\_of\_frames, no\_of\_pages, frames[10], pages[30], counter = 0, time[10], flag1, flag2, i,

j, pos, faults = 0;

printf("Enter number of frames: "); scanf("%d", & no\_of\_frames); printf("Enter number of pages: ");

scanf("%d", & no\_of\_pages); printf("Enter reference string: ");

for (i = 0; i < no\_of\_pages; ++i)

{

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

}

for (i = 0; i < no\_of\_frames; ++i)

{

frames[i] = -1;

for (i = 0; i < no\_of\_pages; ++i)

{

flag1 = flag2 = 0; for (j = 0; j < no\_of\_frames; ++j)

{

if (frames[j] == pages[i])

{

counter++; time[j] = counter; flag1 = flag2 = 1; break;

}

}

if (flag1 == 0) { for (j = 0; j < no\_of\_frames; ++j)

{

if (frames[j] == -1)

{

counter++; faults++; frames[j] = pages[i]; time[j]

= counter; flag2 =

1; break;

}

}

}

if (flag2 == 0) { pos = findLRU(time, no\_of\_frames); counter++; faults++; frames[pos] = pages[i]; time[pos] = counter;

}

printf("\n"); for (j = 0; j < no\_of\_frames; ++j)

{

printf("%d\t", frames[j]);

}

}

printf("\n\nTotal Page Faults = %d", faults); return 0;