7.PAGE REPLACEMENT METHOD

#include <stdio.h>

int findIndex(int page, int frame[], int n) {

int i;

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

if (frame[i] == page) {

return i;

}

}

return -1;

}

int main() {

int page\_faults = 0, m, n, i, j;

int pages[] = {1, 2, 3, 2, 1, 5, 2, 1, 6, 2, 5, 6, 3, 1, 3, 6, 1, 2, 4, 3};

int page\_frames[3] = {-1, -1, -1};

int frame\_count = 0;

for (i = 0; i < 20; i++) {

int index = findIndex(pages[i], page\_frames, frame\_count);

if (index == -1) {

page\_faults++;

if (frame\_count < 3) {

page\_frames[frame\_count] = pages[i];

frame\_count++;

}

else {

int min = 20;

for (j = 0; j < 3; j++) {

int k;

for (k = i - 1; k >= 0; k--) {

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

if (k < min) {

min = k;

m = j;

}

break;

}

}

}

page\_frames[m] = pages[i];

}

}

}

printf("Number of Page Faults = %d\n", page\_faults);

return 0;

}

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