

```

#include<stdio.h>

int main()
{
    int n, f, i, j, min, pf = 0, next = 1;
    int m[25], count[25], flag[50], rs[50];

    printf("\nLRU PAGE REPLACEMENT\n");
    printf("ENTER NUMBER OF PAGES: ");
    scanf("%d", &n);

    printf("ENTER THE REFERENCE STRING: ");
    for (i = 0; i < n; i++)
    {
        scanf("%d", &rs[i]);
    }

    printf("ENTER THE NUMBER OF FRAMES: ");
    scanf("%d", &f);

    for (i = 0; i < n; i++)
        flag[i] = 0;

    for (i = 0; i < f; i++)
    {
        count[i] = 0;
        m[i] = -1;
    }

    printf("\nLRU PAGE REPLACEMENT --\n");
    for (i = 0; i < n; i++)
    {
        for (j = 0; j < f; j++)
        {
            if (m[j] == rs[i])
            {
                flag[i] = 1;
                count[j] = next++;
            }
        }

        if (flag[i] == 0)
        {
            if (i < f)
            {
                m[i] = rs[i];
                count[i] = next++;
            }
            else
            {
                min = 0;
                for (j = 1; j < f; j++)
                {
                    if (count[min] > count[j])
                        min = j;
                }
                m[min] = rs[i];
                count[min] = next++;
            }
            pf++;
        }
    }

    for (j = 0; j < f; j++)
        printf("%d\t", m[j]);
    if (flag[i] == 0)
        printf("HIT");
    else
        printf("MISS");
    printf("\n");
}

printf("\nPAGE FAULT: %d\n", pf);
printf("HIT RATIO: %d%%\n", ((n - pf) * 100) / n);
return 0;
}

```