```
#include<stdio.h>

struct frmnode
{
        int pno;
} frames[20];

int n;

int page_found(int pno)
{
        int fno;
        for(fno = 0; fno < n; fno++)
                if(frames[fno].pno == pno)
                        return fno;

        return -1;
}

int get_free_frame()
{
        int fno;
        for(fno = 0; fno < n; fno++)
                if(frames[fno].pno == -1)
                        return fno;

        return -1;
}

int get_fifo_frame()
{
        static int fno = -1;
        fno = (fno + 1) % n;
        return fno;
}

void main()
{
        int p_request[] = {12, 15, 12, 18, 6, 8, 11, 12, 19, 12, 6, 8, 12, 15, 19,
8};
        int size = 16;
        int page_falts = 0, i, j, fno;

        printf("How many frames : ");
        scanf("%d", &n);

        for(i = 0; i < n; i++)
                frames[i].pno = -1;

        printf("\nPage No\t\tPage Fault\tPage Frames");
```

```
        printf("\n----------------------------------");

        for(i = 0; i < size; i++)
        {
                j = page_found(p_request[i]);

                if(j == -1)
                {
                        page_falts++;
                        j = get_free_frame();
                        if(j == -1)
                                j = get_fifo_frame();
                        frames[j].pno = p_request[i];

                        printf("\n%d\t\tYES\t", p_request[i]);
                }
                else
                        printf("\n%d\t\tNO\t", p_request[i]);

                for(fno = 0; fno < n; fno++)
                        printf("\t%d", frames[fno].pno);
        }

        printf("\n----------------------------------");
        printf("\nTotal no of page faults : %d\n", page_falts);
}
```