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PROGRAMMING TEST 3

CODE:

```c
#include <stdio.h>
#include <stdlib.h>

int* input(int n , int f , int page[] , int frame[])
{
    printf("Enter the number\n");
    for(int i = 0 ; i < n ; i++)
    {
        scanf("%d",&page[i]);
    }
    for(int j = 0 ; j < f ; j++)
    {
        frame[j]=-1;
    }
    return page;
}

void trashing( int f , int pftc)
{
    if(pftc>f)
        printf("Trashing detected\n");

}

void fifo(int n , int f , int page[] , int frame[])
{
    int i , j;
    int count=0;
    int pf=0;
    int pftc = 0;
    printf("\nFIFO\n");
    for(i = 0 ; i < n ; i++)
    {
        for( j = 0 ; j < f ; j++)
        {
            if(frame[j]==page[i])  //hit
            break;
        }
        if(j == f)
```

```c
            {
                    frame[count++] = page[i];
                    pf++;
                    pftc++;
            }
            if(pftc>f)
            {
                    trashing(f , pftc);
                    pftc=0;
            }
            for( j = 0 ; j < f ; j++)
            {
                    printf("%d\t",frame[j]);
            }
            printf("\tPF-NO = %d\n",pf);
            if(count==f)
                    count=0;
        }
}

void main()
{
    int n , f , page[20] , frame[10] ;
    printf("Enter the no of pages\n");
    scanf("%d",&n);
    printf("Enterthe no of frames\n");
    scanf("%d",&f);
    input(n , f , page , frame);
    fifo(n , f , page , frame);
}
```

OUTPUT:

```
aneesh@aneesh:~/Desktop$ gcc fifo.c
aneesh@aneesh:~/Desktop$ ./a.out
Enter the no of pages
20
Enterthe no of frames
5
Enter the number
1 2 4 5 1 5 3 2 6 1 6 3 3 1 5 7 3 2 1 3

FIFO
1         -1        -1        -1        -1        PF-NO = 1
1         2         -1        -1        -1        PF-NO = 2
1         2         4         -1        -1        PF-NO = 3
1         2         4         5         -1        PF-NO = 4
1         2         4         5         -1        PF-NO = 4
1         2         4         5         -1        PF-NO = 4
1         2         4         5         3         PF-NO = 5
1         2         4         5         3         PF-NO = 5
Trashing detected
6         2         4         5         3         PF-NO = 6
6         1         4         5         3         PF-NO = 7
6         1         4         5         3         PF-NO = 7
6         1         4         5         3         PF-NO = 7
6         1         4         5         3         PF-NO = 7
6         1         4         5         3         PF-NO = 7
6         1         4         5         3         PF-NO = 7
6         1         7         5         3         PF-NO = 8
6         1         7         5         3         PF-NO = 8
6         1         7         2         3         PF-NO = 9
6         1         7         2         3         PF-NO = 9
6         1         7         2         3         PF-NO = 9
aneesh@aneesh:~/Desktop$ 
```