

**Ex. No: 11a**

**Date: 15-05-2024**

### **FIFO PAGE REPLACEMENT**

**Aim:**

To find out the number of page faults that occur using First-in First-out (FIFO) page replacement technique.

**Algorithm:**

1. Declare the size with respect to page length
2. Check the need of replacement from the page to memory
3. Check the need of replacement from old page to new page in memory
4. Form a queue to hold all pages
5. Insert the page require memory into the queue
6. Check for bad replacement and page fault
7. Get the number of processes to be inserted
8. Display the values

**Program Code:**

```
#include<stdio.h>
int main()
{
    int i,j,n,a[50],frame[10],no,k,avail,count=0;
    printf("\n ENTER THE NUMBER OF PAGES:\n");
    scanf("%d",&n);
    printf("\n ENTER THE PAGE NUMBER :\n");
    for(i=1;i<=n;i++)
        scanf("%d",&a[i]);
    printf("\n ENTER THE NUMBER OF FRAMES :");
    scanf("%d",&no);
    for(i=0;i<no;i++)
        frame[i]= -1;
    j=0;
    printf("\tref string\t page frames\n");
    for(i=1;i<=n;i++)
    {
        printf("%d\t\t",a[i]);
        avail=0;
        for(k=0;k<no;k++)
        if(frame[k]==a[i])
            avail=1;
        if (avail==0)
        {
            frame[j]=a[i];
            j=(j+1)%no;
            count++;
        }
    }
}
```

```

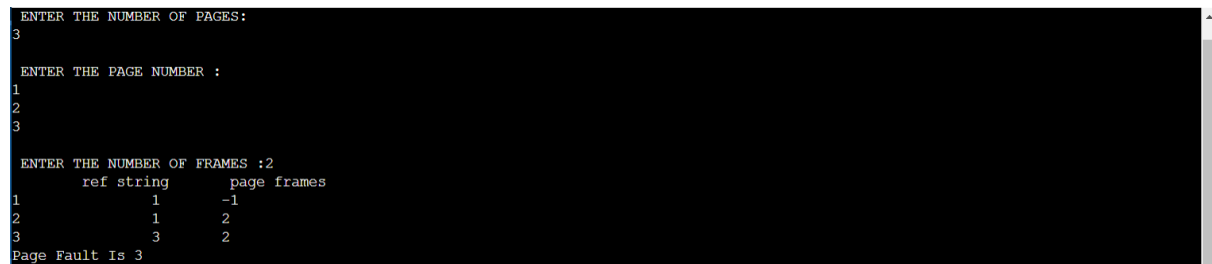
        for(k=0;k<no;k++)
        printf("%d\t",frame[k]);
    }

    printf("\n");
}

printf("Page Fault Is %d",count);
return 0;
}

```

## OUTPUT:



```

ENTER THE NUMBER OF PAGES:
3

ENTER THE PAGE NUMBER :
1
2
3

ENTER THE NUMBER OF FRAMES :2
ref string      page frames
1             1      -1
2             1       2
3             3       2
Page Fault Is 3

```

## RESULT:

Hence the C program to find out the number of page faults that occurs using the First-in First-out (FIFO) page replacement technique has been successfully executed.