

## FIFO Page Replacement

```
//fifo page replacement
#include<stdio.h>
#include<stdlib.h>
#include<string.h>
int search(char c);
void enq(char p);
void display();
int k=-1;
char a1[20];
char a2[20];
int pFault=0;
int pFrame;
main()
{
    int f=0,i,n;
    char s;

    printf("enter reference string\n");
    --fpurge(stdin);
    gets(a1);
    printf("Enter the number of pages frames\n");
    scanf("%d",&pFrame);

    for(i=0;i<pFrame;i++)
    {
        a2[i]='_';
    }
    for(i=0;i<strlen(a1);i++)
    {
        if(a1[i]!=' ')
        {
            f=search(a1[i]);
            if(f==0)
            {
                enq(a1[i]);
            }
            display();
            f=0;
        }
    }
    printf("—————\n");
    printf("Total no of page fault=%d\n",pFault);
}
int search(char c)
{
    int s;
```

```
    for ( s=0;s<pFrame; s++)
    {
        if ( a2 [ s]==c )
        {
            return (1) ;
            break ;
        }
    }
    if ( s==pFrame )
    {
        return (0) ;
    }
}
void enq (char p)
{
    a2 [ ( k+1)%pFrame]=p ;
    k=(k+1)%pFrame ;
    pFault++ ;
}
void display ()
{
    int j ;
    printf ("_____\\n") ;
    for ( j=0;j<pFrame;j++)
    {
        printf ("%c\\t", a2 [ j ]) ;
    }
    printf ("\\t\\tPage fault=%d", pFault) ;
    printf ("\\n") ;
}
}
```

## Output

```
42813@user:/mnt/42813/oslab$ ./fif
enter reference string
12323456
Enter the number of pages frames
3
```

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```
1 - -      Page fault=1
```

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```
1 2 -      Page fault=2
```

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```
1 2 3      Page fault=3
```

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```
1 2 3      Page fault=3
```

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```
1 2 3      Page fault=3
```

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4	2	3	Page fault=4
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4	5	3	Page fault=5
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4	5	6	Page fault=6
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Total no of page fault=6