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/* Array Implementation of Circular Queue */
#include <stdio.h>

# define MAX 10
int arr[MAX] ;
int front, rear ;

void addq ( int item )
{
if ( ( rear == MAX - 1 && front == 0 ) || ( rear + 1 == front ) )
{
        printf ( "\nQueue is full" ) ;
        return ;
}
if ( rear == MAX - 1 )
        rear = 0 ;
else
        rear++ ;

arr[rear] = item ;
if ( front == -1 )
        front = 0 ;
}

void delq( )
{
int data ;
if ( front == -1 )
{
        printf ( "\nQueue is Empty" ) ;
}
else{
        data = arr[front] ;
        if ( front == rear ) front = rear = -1 ;
        else
        {               if ( front == MAX - 1 )     front = 0 ;
                else    front++ ;
        }

        printf("Data pop'ed=%d\n",data);
}
}
```

```
void main( )
{
int data,choice;

rear = front = -1 ;
do{
        printf("\n1. Enqueue\n");
        printf("2. Dequeue\n");
        printf("3. Exit\n");
        printf("Feed in your choice; ");
        scanf("%d",&choice);

        if (choice==1)
        {
                printf("Feed in data to enqueue: ");
                scanf("%d",&data);
                addq(data);
        }

        if (choice==2)
        {
                delq( ) ;
        }
}while(choice!=3);
}
```