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Q#include<stdio.h>
#define size 5

int arr[size];
int front=-1, rear=-1;

void enqueue(int val)
{
    if((rear+1)%size==front)
    {
        printf("Queue is overflow..!\n");
    }

    else if(front== -1 && rear == -1)
    {
        front=rear=0;
        arr[rear]=val;
    }

    else
    {
        rear=(rear+1)%size;
        arr[rear]=val;
    }
}

void dequeue()
{
    if(front== -1)
    {
        printf("Queue is underflow..!\n");
    }
    else if(front == rear)
    {
        front=rear=-1;
    }
    else
    {
        printf("%d", arr[front]);
        front=(front+1)%size;
    }
}

void display()
{
    int i;
    if(front== -1 && rear == -1)
    {
        printf("Queue is underflow..!\n");
    }
    else
    {
        for(i=front; i!=rear; i=(i+1)%size)
        {
            printf("%d\t", arr[i]);
        }
        printf("%d\t", arr[rear]);
    }
}

int main() {
    int x, data;

    while(1)
    {

```

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{
    printf("\nQueue operations\n1) Enqueue\n2) Dequeue\n3) Display\n4) Exit\nEnter the
Queue operations:");
    scanf("%d",&x);
    switch(x)
    {
        case 1:
            printf("Enter the inserting element:");
            scanf("%d",&data);
            enqueue(data);
            break;
        case 2:
            dequeue();
            break;
        case 3:
            display();
            break;
        case 4:
            printf("Exited...!");
            printf("-----");
            exit(0);
        default:
            printf("Invalid choice.Please enter 1 to 5");
            break;
    }
}
}

```