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4 #include <stdio.h>
#include <stdlib.h>
#define MAX 5
int front = 0;
int rear = -1;
int queue[MAX];
void Enque(int);
int Deque();
void Display();
int main()
{
    int option;
    int item;
    do {
        printf("\n 1. Insert to Queue);
        printf("\n 2. Delete from Queue. In 3. Display
        the content In 4. Exit\n");
        printf("Enter the option:");
        scanf("%d", &option);
        switch(option)
        {
            case 1: printf("Enter the element\n");
                    scanf("%d", &item);
                    Enque(item);
                    break;
            case 2: item = Deque();
                    if (item == -1)
                        printf("Queue is empty\n");
                    else
                        printf("Removed element from
                        queue %d", item);
                    break;
        }
    } while (option != 4);
}
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    case 3: Display();
              break;
    case 4: exit(0);
  }
} while (option != 4);
return 0;
}

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void Enqueue (int ele)
{
    if ((front == 0 && rear == MAX-1) || (front == rear+1))
    {
        printf("Queue is full\n"); return;
    }
    else {
        rear = (rear+1)%MAX;
        queue[rear] = ele;
        if (front == -1)
            front = 0;
    }
}

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int Dequeue ()
{
    int item;
    if ((front == -1) && (rear == -1))
    {
        return (-999);
    }
    else {
        item = queue[front];
        if (front == rear)
        {
            front = -1;
            rear = -1;
        }
        else {
            front = (front+1)%MAX;
        }
        return item;
    }
}

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void Display ()
{
    int i;
    if ((front == -1) && (rear == -1) || (front == rear))
    {
        printf("Queue is empty\n"); return;
    }
    else {
        printf("Queue contents:\n");
        for (i = front; i <= rear; i++)
            printf("%d ", queue[i]);
    }
}

```