main.c

```c
#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;
     int i=1;
    do{
        printf("\n 1. Insert to Queue (EnQueue)");
        printf("\n 2. delete from the Queue (DeQueue)");
        printf("\n 3. Display the content ");
        printf("\n 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");
```

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```
30              case 2: item=Deque();
31                      if(item==-1)
32                          printf("Queue is empty\n");
33                      else
34                      printf("Removed element from the queue %d",item);
35                      break;
36              case 3: display();
37                      break;
38          }
39      } while (i==1);
40    return 0;
41  }
42
43  void Enque(int ele)
44  {
45      if (rear==MAX-1)
46          printf("Queue is full\n");
47      else
48      {
49        rear++;
50        queue[rear]=ele;
51
52      }
53  }
54  int Deque()
55  {
56      int item;
57      if(front == -1)
58          return -1;
59      else
60      {
61          item=queue[front];
62          front++;
```

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```
60      {
61          item=queue[front];
62          front++;
63          if(front>rear)
64          {
65              front=-1;
66              rear=-1;
67          }
68          return item;
69      }
70
71  }
72
73  void display()
74  {
75      int i;
76      if(front==-1)
77          printf("Queue is empty\n");
78      else
79      {
80          printf("\n Queue contents:");
81          for(i=front;i<=rear;i++)
82              printf("%d", queue[i]);
83      }
84  }
```