```c
#include <stdio.h>
#include <stdlib.h>
#define Max 3

void insert(char q[], int *r, int *cnt) {
    char ele;
    if (*cnt == Max)
    {
        printf("C Queue overflow\n");
        return;
    }

    *r = (*r + 1) % Max;
    printf("Enter the element: ");
    scanf(" %c", &ele);
    q[*r] = ele;
    (*cnt)++;
}

void del(char q[], int *f, int *cnt)
{
    if (*cnt == 0)
    {
        printf("C Queue is empty\n");
        return;
    }

    printf("Element deleted from circular queue is %c\n", q[*f]);
    *f = (*f + 1) % Max;
    (*cnt)--;
}

void display(char q[], int f, int cnt)
{
    int i, j;
    if (cnt == 0)
    {
        printf("Circular Queue is empty\n");
        return;
    }
    printf("Circular Queue contents are:\n");

    for (i = f, j = 0; j < cnt; j++)
    {
        printf("%d : %c\n", i, q[i]);
        i = (i + 1) % Max;
    }
}

int main()
{
    char q[Max];
    int r = -1, f = 0, cnt = 0;
```

```
54      int ch;
55
56      while(1)
57      {
58          printf("1: Insert\n2: Delete\n3: Display\n4: Exit\n");
59          printf("Enter choice\n");
60          scanf("%d", &ch);
61          switch(ch)
62          {
63              case 1: insert(q, &r, &cnt); break;
64              case 2: del(q, &f, &cnt); break;
65              case 3: display(q, f, cnt); break;
66              default: exit(0);
67          }
68      }
69  }
70
71
72
```