```c
#include<stdlib. h>
#include<stdio. h>
#define max 5
int front=-1, rear=-1;
int CQueue[max];
void insert();
int delete();
void display();
void search();
int main()
{
    int w, no;
    for(; ; )
    {
        printf("\n:: Menu ::\n");
        printf("\n _________\n");
        printf("\n1. Insert");
        printf("\n2. Delete");
        printf("\n3. Display");
        printf("\n4. Search");
        printf("\n5. EXIT");
        printf("\nEnter any option : \n");
        scanf("%d", &w);
        switch(w)
        {
        case 1:
            insert();
            break;
        case 2:
            no=delete();
            break;
        case 3:
            display();
            break;
        case 4:
            search();
        case 5:
            exit(0);
        default:
            printf("\nInvalid Option! ! \n");
        }
    }
}
void insert()
{
    int no;
    if((front ==0 && rear == max-1) || front == rear+1)
    {
        printf("\nCircular Queue Is Full ! \n");
        return;
    }
    printf("\nEnter a number to Insert :\n");
    scanf("%d", &no);
    if(front==-1)
        front=front+1;
    if(rear==max-1)
        rear=0;
    else rear=rear+1;
        CQueue[rear]=no;
}
```

```c
}
int delete()
{
    int e;
    if(front==-1)
    {
        printf("\nThe Circular Queue is Empty !!\n");

    }
    e=CQueue[front];
    if(front==max-1)
        front=0;
    else if(front==rear)
    {
        front=-1;
        rear=-1;
    }
    else front=front+1;
    printf("\n%d was deleted !\n", e);
    return e;
}
void display()
{
    int i;
    if(front==-1)
    {
        printf("\nThe Circular Queue is Empty! .  Nothing To Display !!\n");
        return;
    }
    i=front;
    if(front<=rear)
    {
        printf("\n\n");
        while(i<=rear)
            printf("%d ", CQueue[i++]);
        printf("\n");
    }
    else
    {
        printf("\n\n");
        while(i<=max-1)
            printf("%d ", CQueue[i++]) ;
        i=0;
        while(i<=rear)
            printf("%d ", CQueue[i++]);
        printf("\n");
    }
}
void search()
{
int item, i, c=0;
printf("Enter the element which is to be searched");
scanf("%d", &item);
for(i=front; i<=rear; i++)
{
if(item==CQueue[i])
{
printf("item found at location %d ", i+1);
c++;
}
}
if(c==0)
printf("item not found");
}
```

Terminal

```
:: Menu ::

 --------

1. Insert
2. Delete
3. Display
4. Search
5. EXIT
Enter any option :
1

Enter a number to Insert :

3

:: Menu ::

 --------

1. Insert
2. Delete
3. Display
4. Search
5. EXIT
Enter any option :
1

Enter a number to Insert :
5

:: Menu ::

 --------

1. Insert
2. Delete
3. Display
4. Search
5. EXIT
Enter any option :
3


3 5

:: Menu ::

 --------

1. Insert
2. Delete
3. Display
4. Search
5. EXIT
Enter any option :
2

3 was deleted !

:: Menu ::

 --------

1. Insert
2. Delete
3. Display
4. Search
5. EXIT
Enter any option :
4
Enter the element which is to be searched5
item found at location 2
Process finished.
```