

```
#include <stdio.h>
```

```
#define size 5
```

```
int queue[size]
```

```
int front = -1;
```

```
int rear = -1;
```

```
void enqueue (int x)
```

```
{
```

```
    if (rear == size - 1)
```

```
        printf ("Queue is full\n");
```

```
    else if (front == -1 && rear == -1)
```

```
    {
```

```
        front++;
```

```
        rear++;
```

```
        queue[rear] = x;
```

```
    }
```

```
    else
```

```
        rear++;
```

```
        queue[rear] = x;
```

```
    }
```

```
}
```

```
int dequeue ()
```

```
{
```

```
    int x;
```

```
    if (front == -1)
```

```
        return -1;
```

```
    else
```

```
    {
```

```
        x = queue[front];
```

```
        front++;
```

```
        if (front > rear)
```



```

    {
        front = -1;
        rear = -1;
    }
    return x;
}
}

```

```

Void display ( )
{
    int i;
    if (front == -1)
        printf ("Queue is empty\n");
    else
    {
        printf ("The queue is : \n");
        for (i = front; i <= rear; i++)
        {
            printf ("%d", queue[i]);
        }
    }
}
}

```

```

int main ( )
{
    int i;
    int x;
    do {
        printf ("\n 1. Insert to Queue");
        printf ("\n 2. delete from the Queue");
        printf ("\n 3. Display the content");
        printf ("\n 4. Exit\n");
        printf ("Enter the option:");
        scanf ("%d", &i);
    } while (i < 5);
}

```



Switch (i)

{

Case 1 : printf ("Enter the element \n");  
scanf ("%d", &x);  
enqueue (x);  
break;

Case 2 : x = dequeue ();

if (x == -1)

printf ("Queue is empty \n");

else

printf ("Removed element from the  
queue %d", x);

break;

Case 3 : display ();

break;

Case 4 : break;

}

}

while (i != 4);

return 0;

}