

```
#include <stdio.h>

#include<stdlib.h>

#define MAX 50

void insert();

void delete();

void display();

int queue_array[MAX];

int rear = - 1;

int front = - 1;

int main()

{

int choice;

while (1)

{

printf("1.Insert element to queue \n");

printf("2.Delete element from queue \n");

printf("3.Display all elements of queue \n");

printf("4.Quit \n");

printf("Enter your choice : \n");

scanf("%d", &choice);

switch(choice)

{

case 1:

insert();

break;

case 2:

delete();

break;

case 3:

display();

break;
```

case 4:

exit(1);

default:

printf("Wrong choice \n");

}

}

}

void insert()

{

int item;

if(rear == MAX - 1)

printf("Queue Overflow \n");

else

{

if(front == - 1)

front = 0;

printf("Insert the element in queue : \n");

scanf("%d", &item);

rear = rear + 1;

queue_array[rear] = item;

}

}

void delete()

{

if(front == - 1 || front > rear)

{

printf("Queue Underflow \n");

return;

}

else

{

```

printf("Element deleted from queue is : %d\n", queue_array[front]);

front = front + 1;

}

}

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

```

```

1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice :
1
Insert the element in queue :
3
1.Insert element to queue
2.Delete element from queue
3.Display all elements of queue
4.Quit
Enter your choice :
4
-----
Process exited after 28.93 seconds with return value 1
Press any key to continue . . . █

```