Queue Program Code:

```
#include<stdio.h>
#include<stdlib.h>
#define max 50
int queue[max],rear=-1,front=-1;
void main(){
int ch,n,i;
while(1)
{
  printf("\nMenu\n");
  printf("Capacity of Queue is %d",max);
  printf("\n choose any operation\n 1.Enqueue\n 2.Dequeue\n
3.Display\n");
  printf("Enter your choice:");
  scanf("%d",&ch);
  switch(ch){
     case 1:if(rear == max - 1)
            printf("Queue Overflow n");
         else
            if(front== -1)
            front = 0;
            printf("Inset the element in queue : ");
            scanf("%d", &n);
            rear = rear + 1;
            queue[rear] = n;
```

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}
     break;
     case 2:if(front == - 1 || front > rear)
             {
                printf("Queue Underflow n");
                return;
             }
          else
            {
              printf("Element deleted from queue is: %d\n",
queue[front]);
              front = front + 1;
            }
     break;
     case 3:
           if(front == -1)
             printf("Queue is empty n");
           else
             {
               printf("Queue is : ",n);
               for(i = front; i <= rear; i++)</pre>
                  printf("%d ", queue[i]);
                 printf("\n");
             }
   }
}
```

Output:

C:\Users\dell\Desktop\Ronika\DS\queue.exe

```
Menu
Capacity of Queue is 50
choose any operation
1. Enqueue
2.Dequeue
3.Display
Enter your choice:1
Inset the element in queue : 1
Menu
Capacity of Queue is 50
choose any operation
1. Enqueue
2.Dequeue
3.Display
Enter your choice:1
Inset the element in queue : 2
Menu
Capacity of Queue is 50
choose any operation
1. Enqueue
2.Dequeue
3.Display
Enter your choice:3
Queue is : 1 2
Menu
Capacity of Queue is 50
choose any operation
1. Enqueue
2.Dequeue
3.Display
Enter your choice:2
Element deleted from queue is : 1
Menu
Capacity of Queue is 50
choose any operation
1. Enqueue
2.Dequeue
3.Display
Enter your choice:3
Queue is : 2
Menu
Capacity of Queue is 50
choose any operation
1. Enqueue
```