Prg.-6

Write a program to implement Queue

```
#include<stdio.h>
#include<conio.h>
#define max 5
int queue[max];
int front=-1, rear=-1;
int main()
{
  int choice;
  clrscr();
  while(1)
  {
  Printf("1. Insert \n");
  printf("2. Delete \n");
  Printf("3. display \n");
  printf("4. Quit \n");
 printf("Enter your choice");
  scanf("%d", &choice);
  switch(choice)
  {
  case 1: insert();
          break;
  case 2: delete_element();
          break;
```

```
case 3 : display();
         break;
case 4 : exit();
         break;
default : printf("\n wrong choice");
}
}
}
insert()
{ int item;
if (rear == max-1)
{
printf ("\n queue is overflow");
}
else
{ if (front == -1)
    front = 0;
Printf (" input the element to the added in
     queue: \n");
Scanf ("%d", &item);
rear = rear+1;
queue [rear] = item;
}
```

```
return;
}
else
{printf("\n int delete_element()
{ if(front == -1 || front > rear)
{ printf("\n Queue under flow \n");
return;
}
else
{printf("\n element deleted from queue : %d",
                    queue[front]);
front ++;
return;
}
}
int display()
{int i;
Printf("\n queue is \n");
for(i = front; i <= rear; i++)
Printf("\t %d", queue[i]);
printf("\n");
return;
}
```

OUTPUT

1. INSERT
2. DELETE
3. DISPLAY
4. QUIT

Enter your choice: 1

insert the element to be added in queue: 3

1. INSERT
2. DELETE
3. DISPLAY
4. QUIT

Enter your choice: 3

Queue is
3

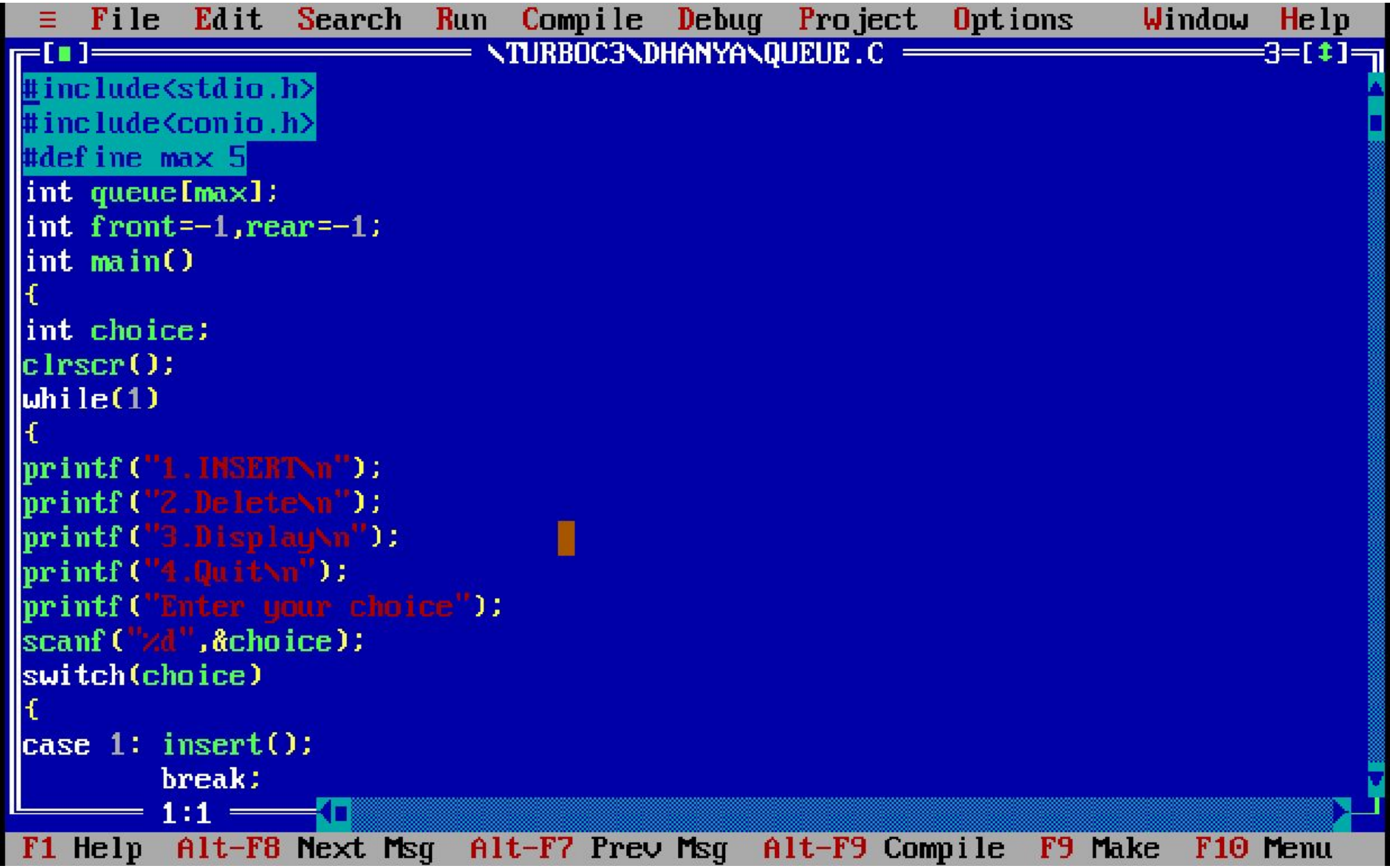
1. INSERT
2. DELETE
3. DISPLAY
4. QUIT

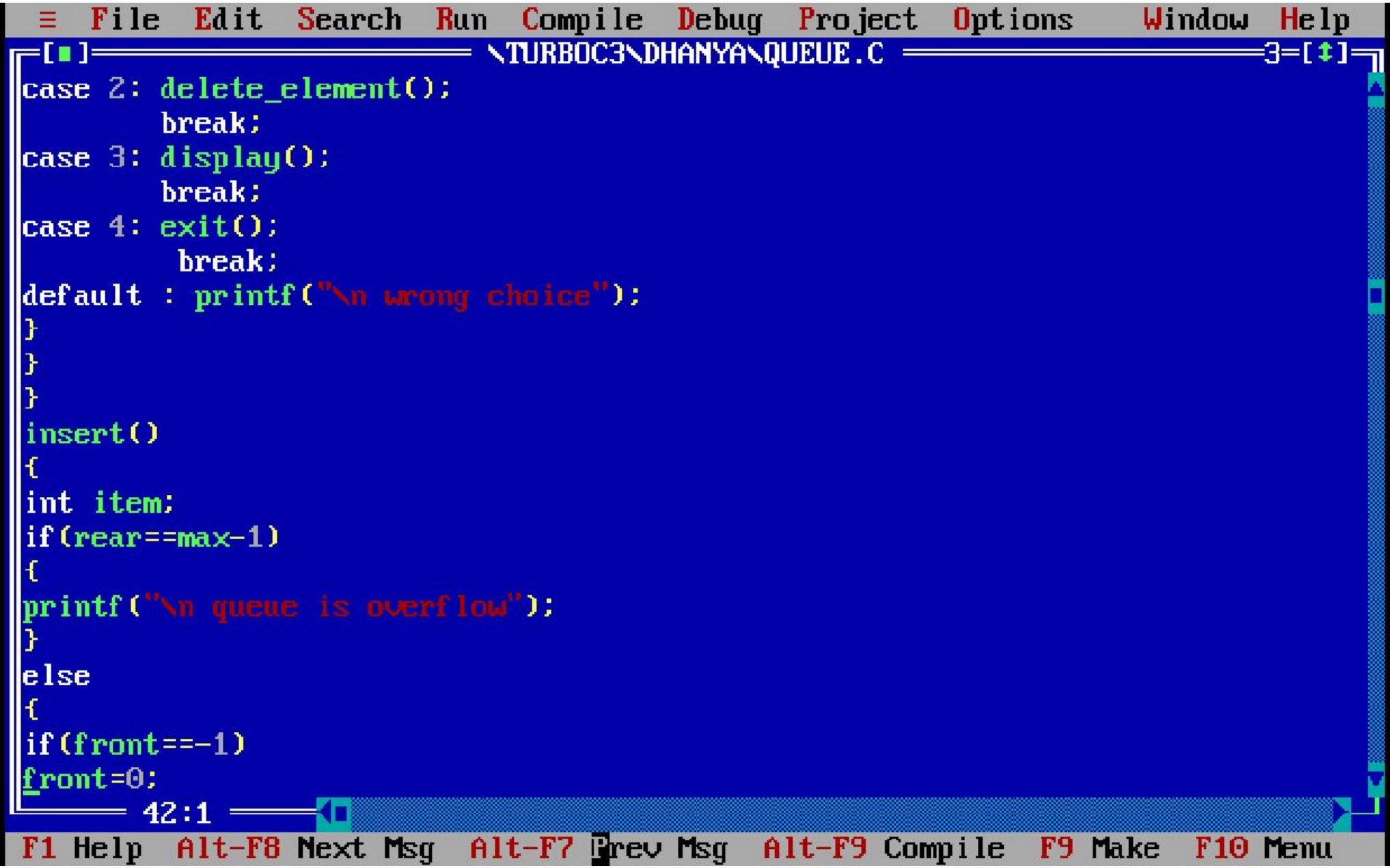
Enter your choice: 2

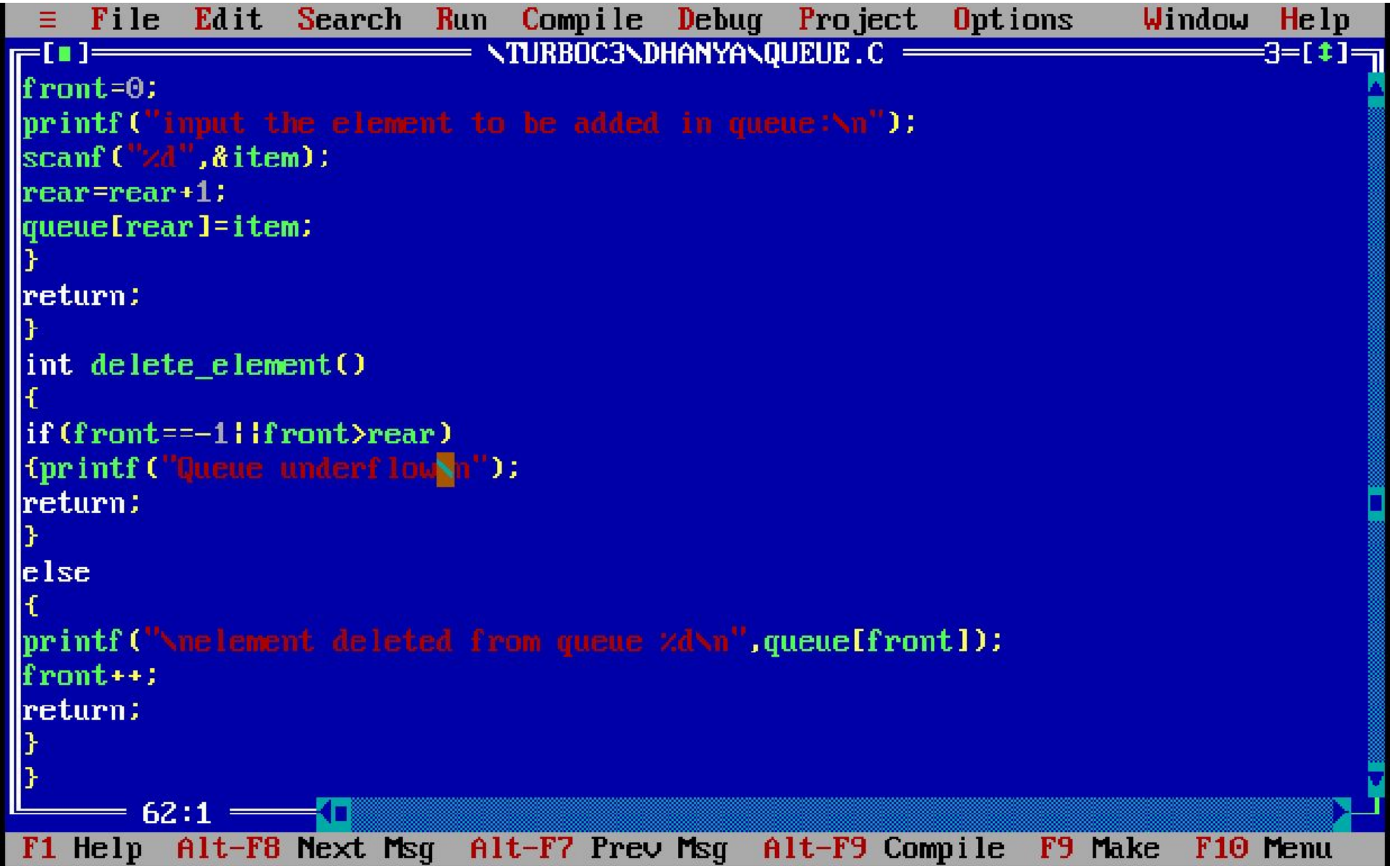
Element deleted from queue 3

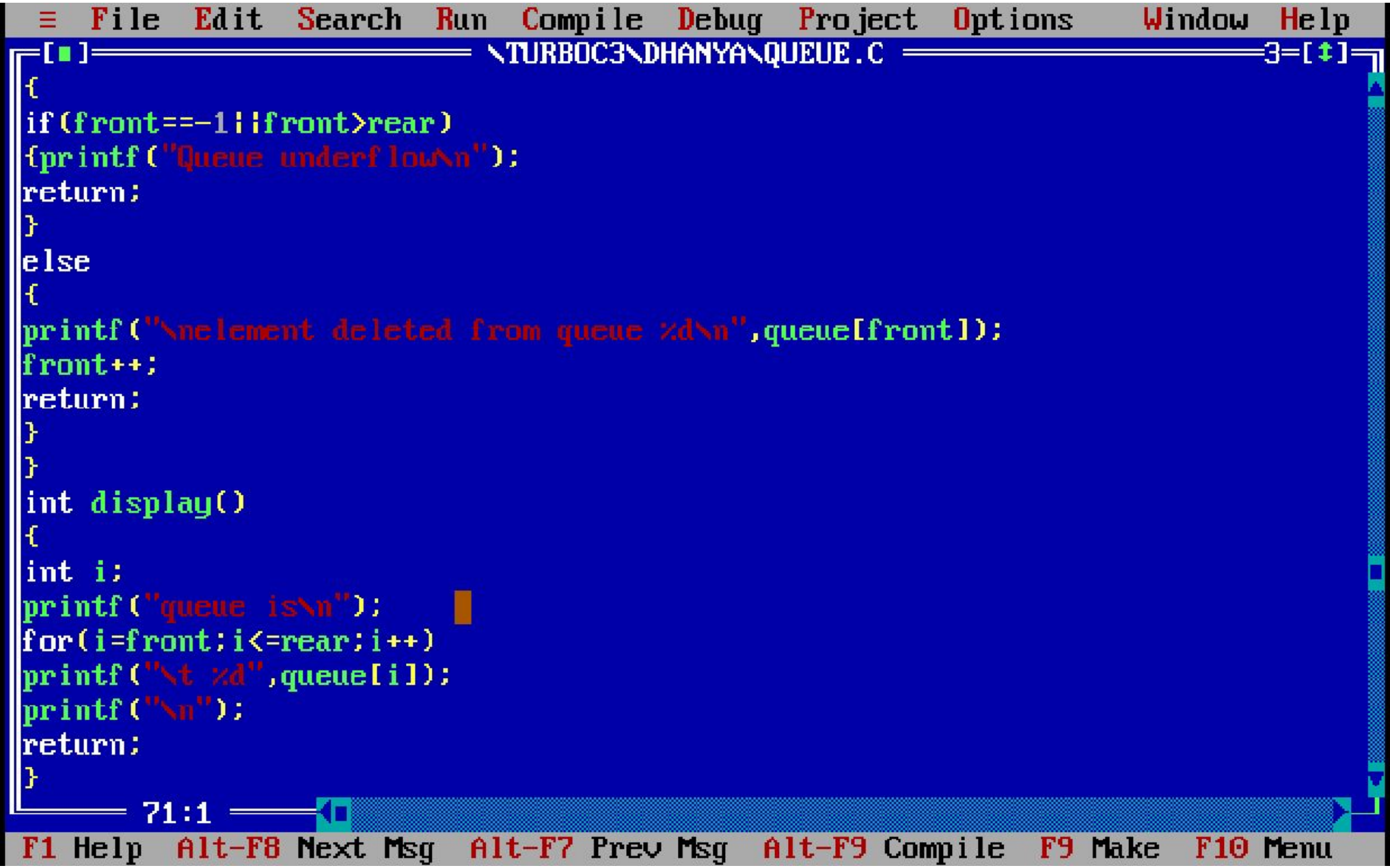
```
2.Delete
3.Display
4.Quit
Enter your choice 1
input the element to be added in queue:
3
1.INSERT
2.Delete
3.Display
4.Quit
Enter your choice 3
queue is
        3
1.INSERT
2.Delete
3.Display
4.Quit
Enter your choice 2

element deleted from queue 3
1.INSERT
2.Delete
3.Display
4.Quit
Enter your choice
```


File Edit Search Run Compile Debug Project Options Window Help
\TURBOC3\DHANYA\QUEUE.C
#include<stdio.h>
#include<conio.h>
#define max 5
int queue[max];
int front=-1,rear=-1;
int main()
{
int choice;
clrscr();
while(1)
{
printf("1.INSERT\n");
printf("2.Delete\n");
printf("3.Display\n");
printf("4.Quit\n");
printf("Enter your choice");
scanf("%d",&choice);
switch(choice)
{
case 1: insert();
break;
1:1
F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
\TURBOC3\DHANYA\QUEUE.C
case 2: delete_element();
break;
case 3: display();
break;
case 4: exit();
break;
default : printf("\n wrong choice");
}
}
}
insert()
{
int item;
if(rear==max-1)
{
printf("\n queue is overflow");
}
else
{
if(front==-1)
front=0;
42:1
F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
\TURBOC3\DHANYA\QUEUE.C
front=0;
printf("input the element to be added in queue:\n");
scanf("%d",&item);
rear=rear+1;
queue[rear]=item;
}
return;
}
int delete_element()
{
if(front==-1||front>rear)
{printf("Queue underflow\n");
return;
}
else
{
printf("\nelement deleted from queue %d\n",queue[front]);
front++;
return;
}
}
62:1
F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
\TURBOC3\DHANYA\QUEUE.C
{
if(front==-1||front>rear)
{printf("Queue underflow\n");
return;
}
else
{
printf("\nelement deleted from queue %d\n",queue[front]);
front++;
return;
}
}
int display()
{
int i;
printf("queue is\n");
for(i=front;i<=rear;i++)
printf("\t %d",queue[i]);
printf("\n");
return;
}
71:1
F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu