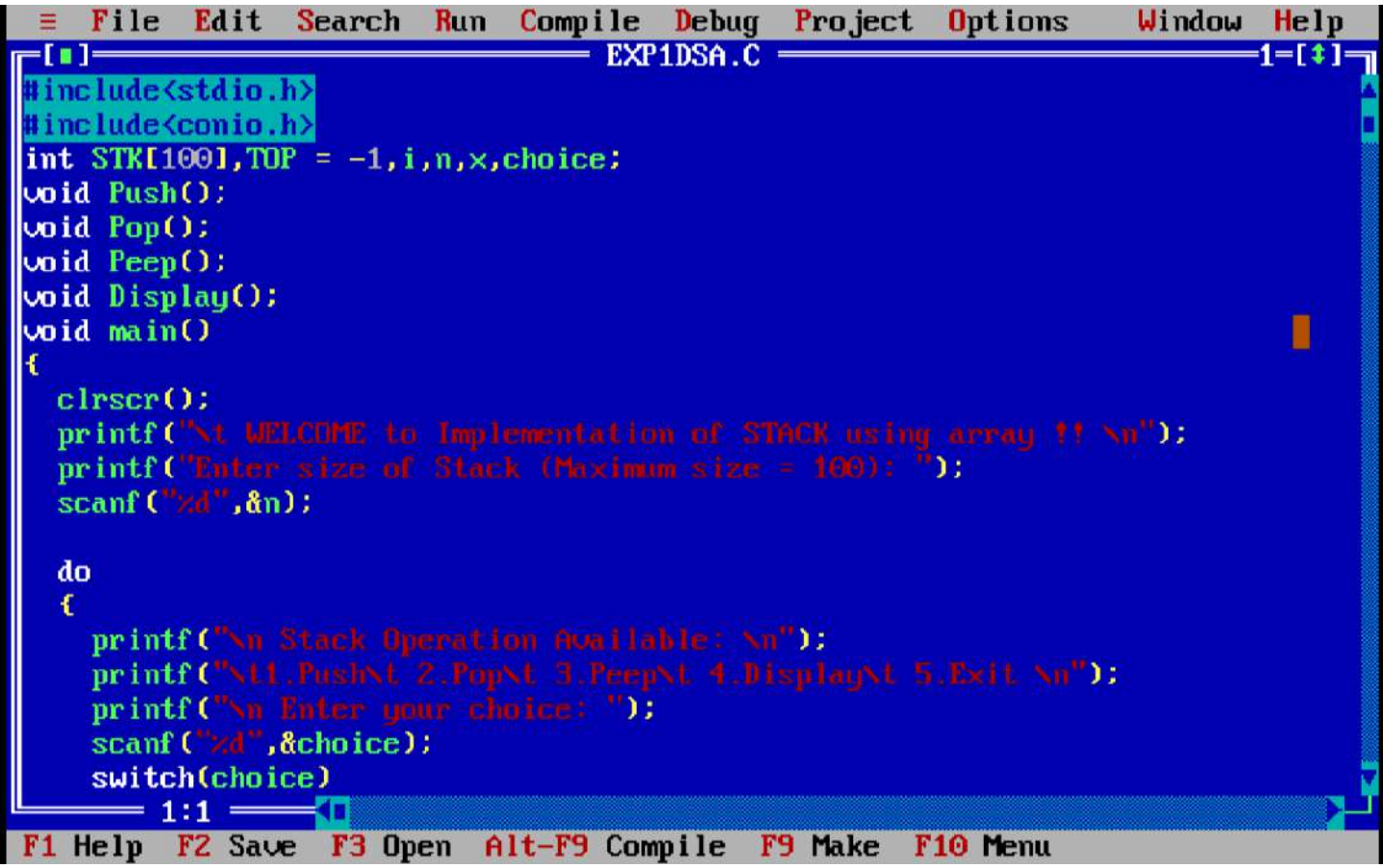
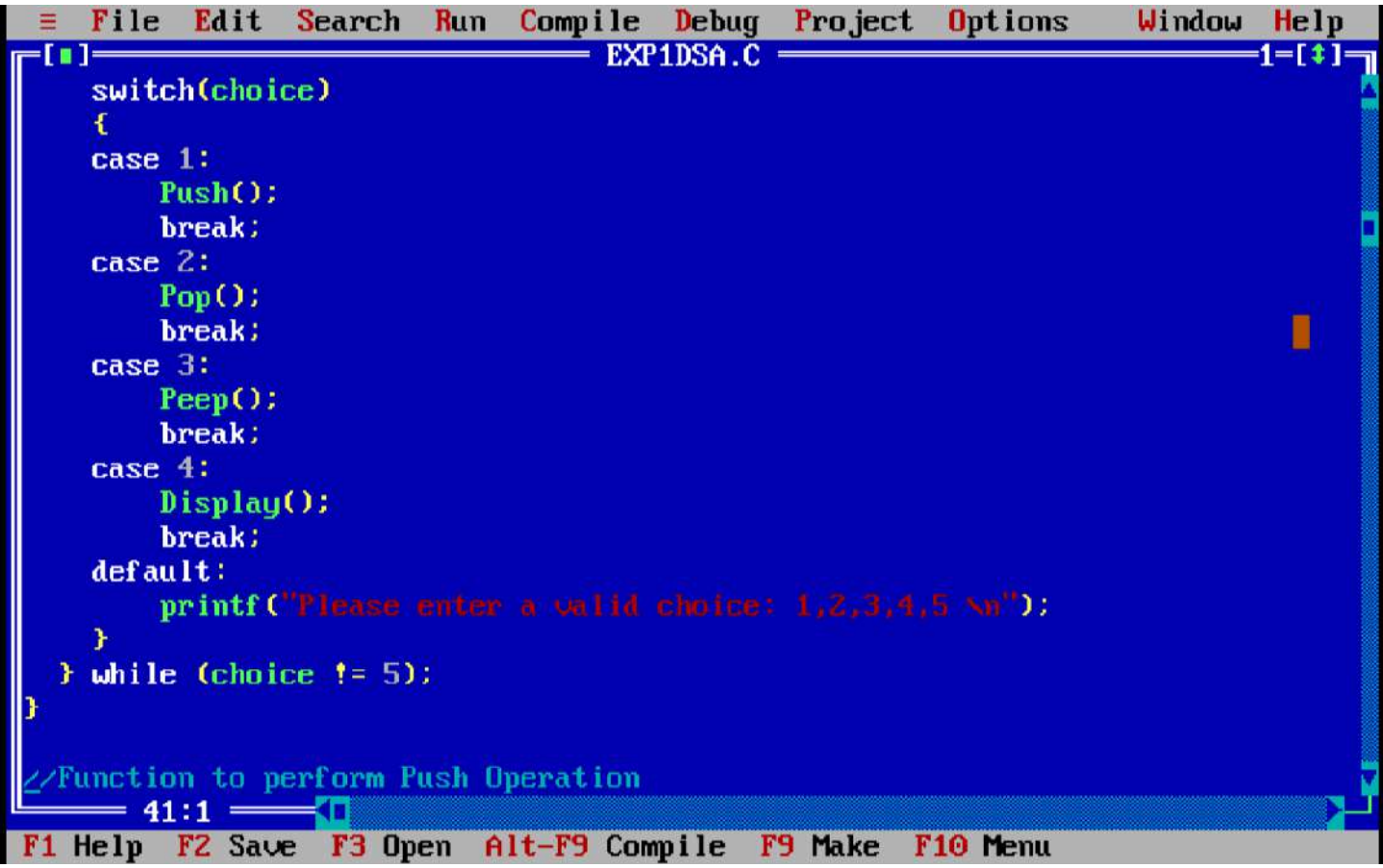
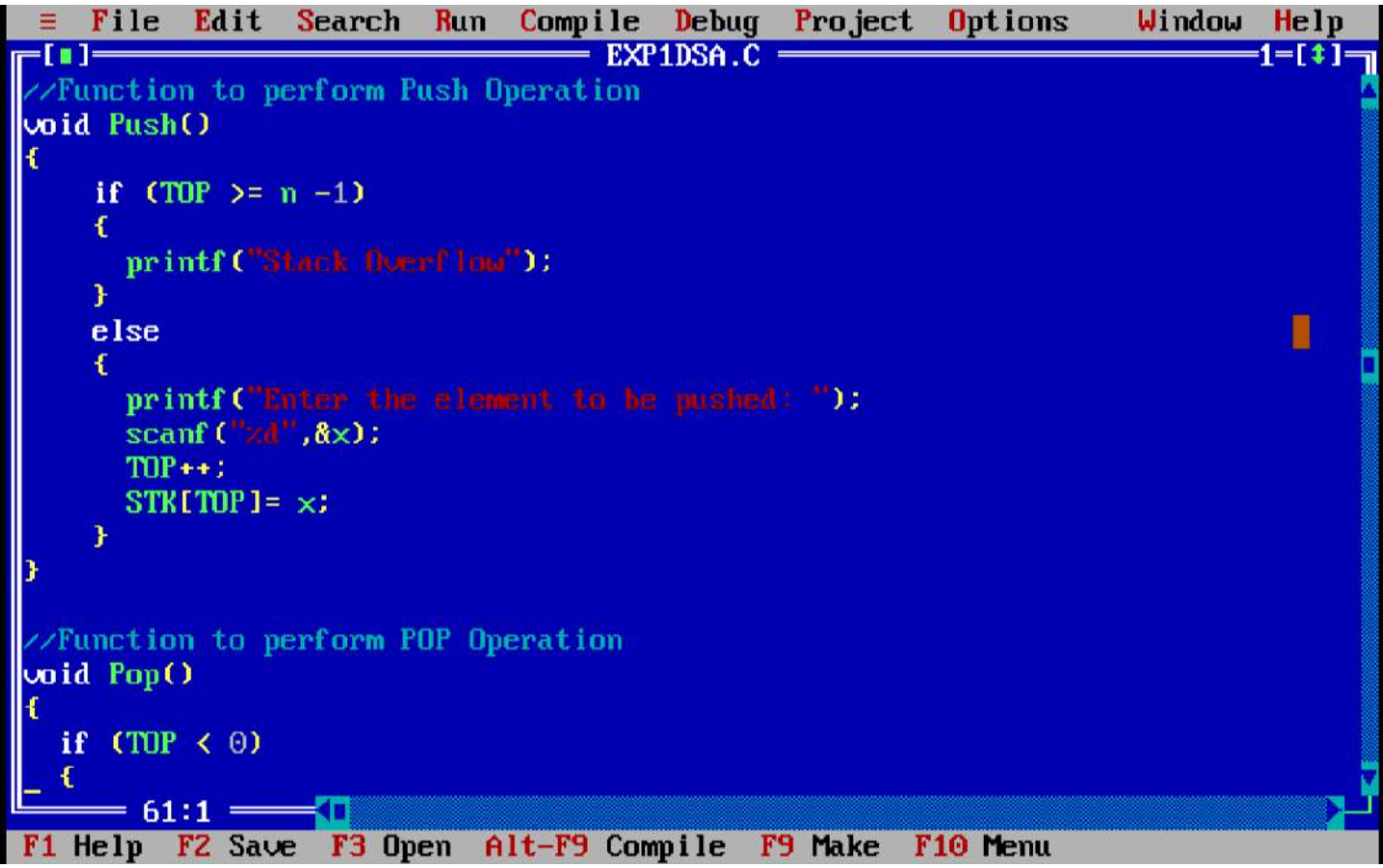
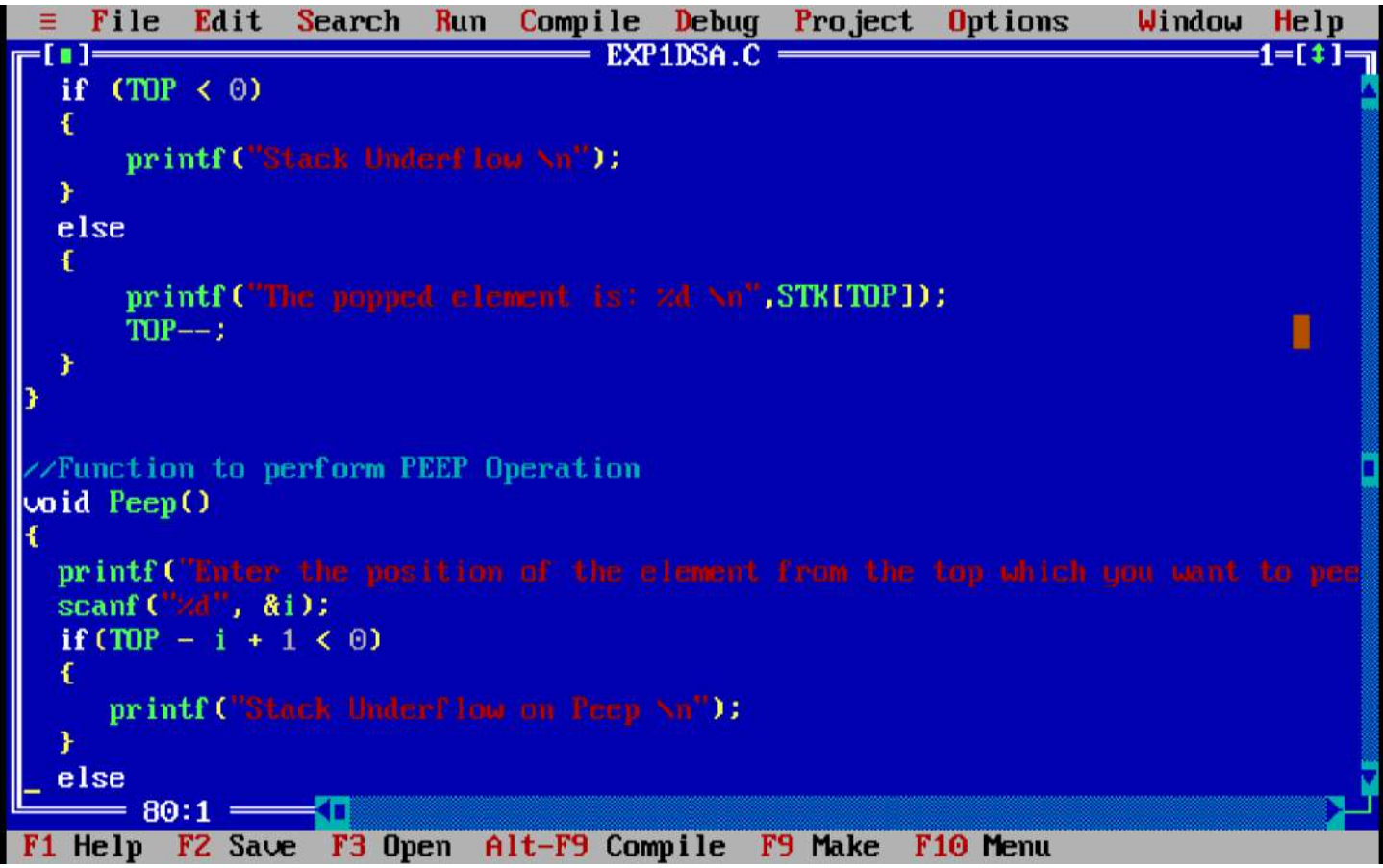
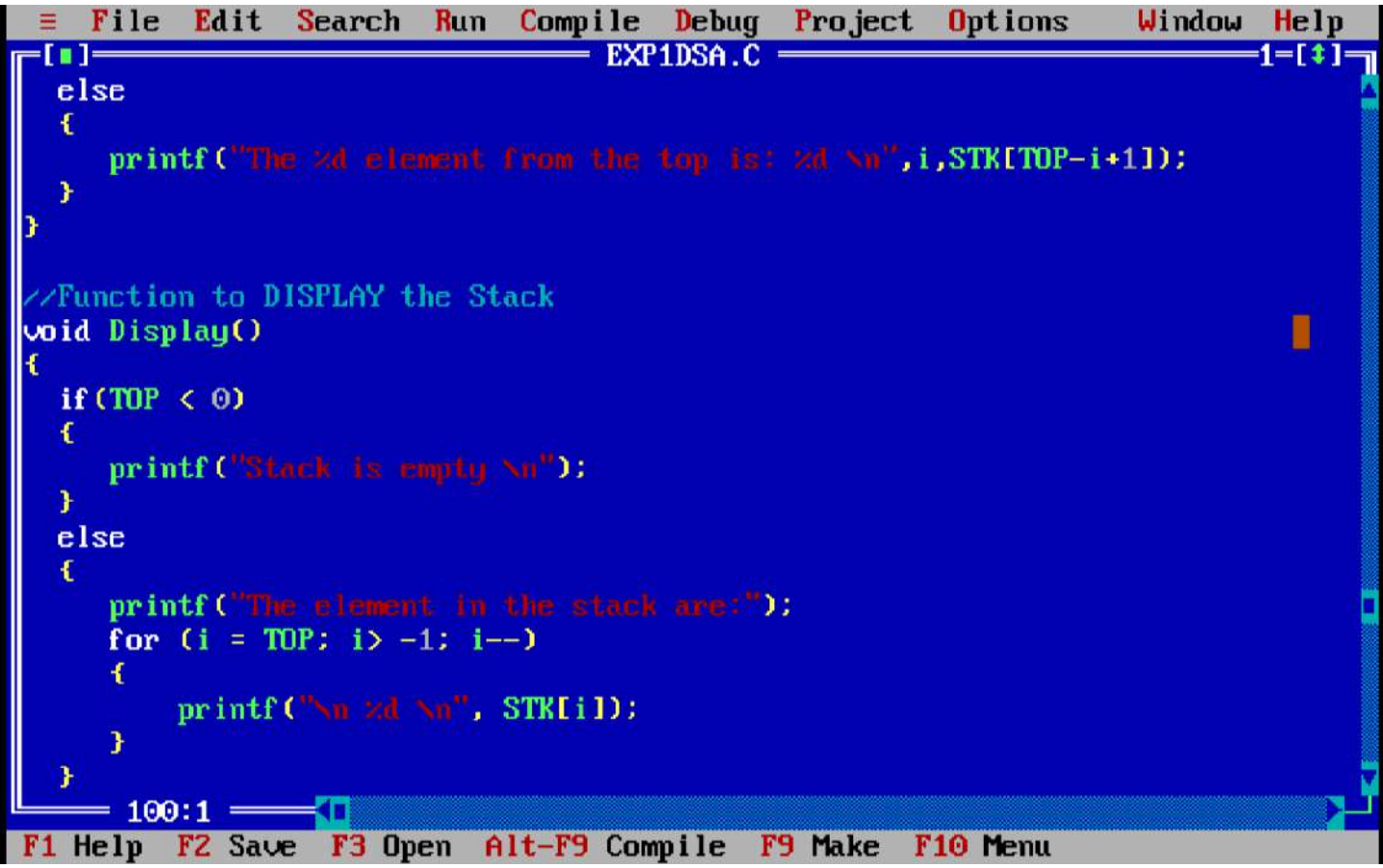
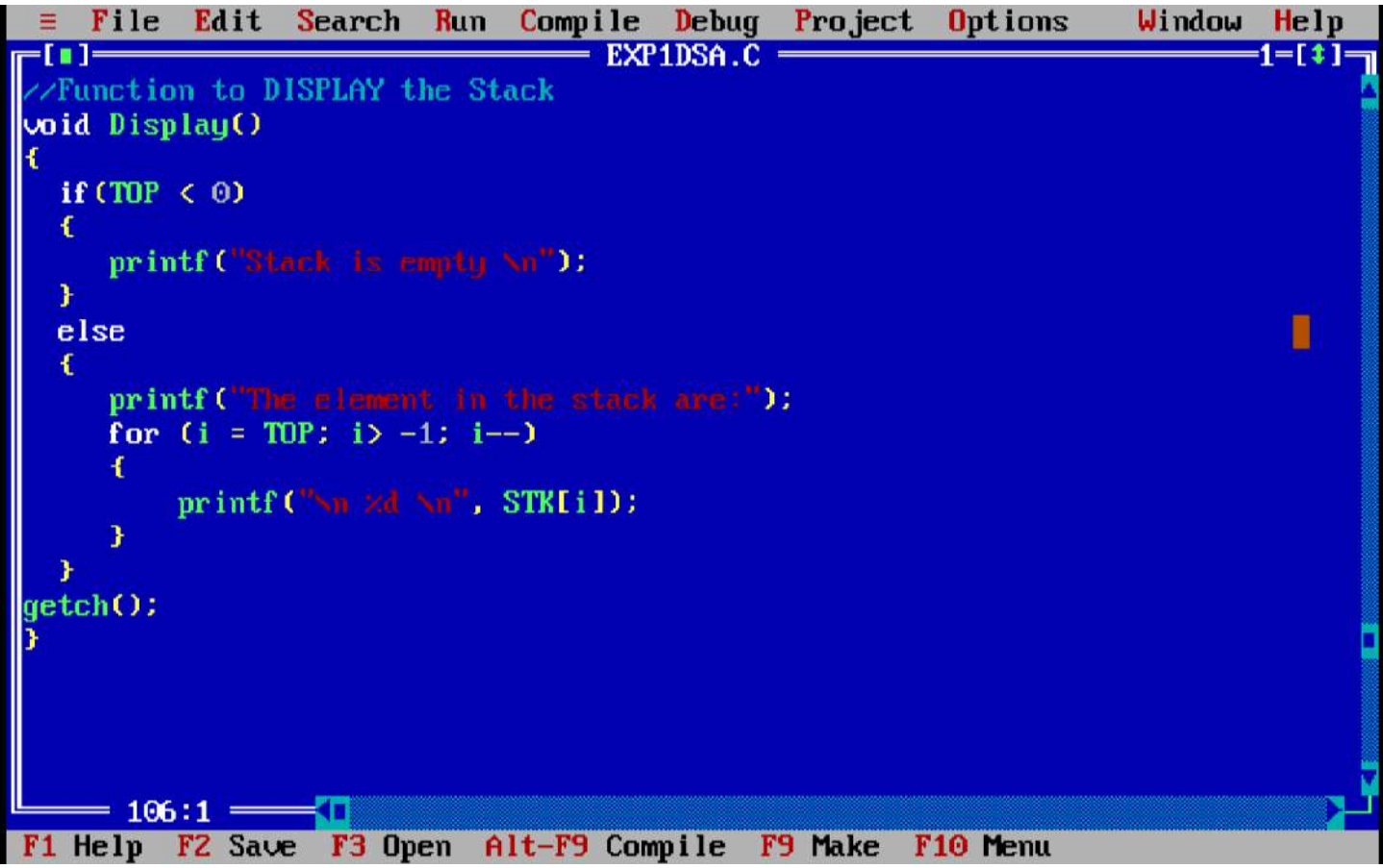

File Edit Search Run Compile Debug Project Options Window Help
EXP1DSA.C
#include<stdio.h>
#include<conio.h>
int STK[100],TOP = -1,i,n,x,choice;
void Push();
void Pop();
void Peep();
void Display();
void main()
{
clrscr();
printf("\t WELCOME to Implementation of STACK using array !! \n");
printf("Enter size of Stack (Maximum size = 100): ");
scanf("%d",&n);
do
{
printf("\n Stack Operation Available: \n");
printf("\t1.Push\t 2.Pop\t 3.Peep\t 4.Display\t 5.Exit \n");
printf("\n Enter your choice: ");
scanf("%d",&choice);
switch(choice)
1:1
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
EXP1DSA.C
switch(choice)
{
case 1:
Push();
break;
case 2:
Pop();
break;
case 3:
Peep();
break;
case 4:
Display();
break;
default:
printf("Please enter a valid choice: 1,2,3,4,5 \n");
}
} while (choice != 5);
}
//Function to perform Push Operation
41:1
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
EXP1DSA.C
//Function to perform Push Operation
void Push()
{
if (TOP >= n -1)
{
printf("Stack Overflow");
}
else
{
printf("Enter the element to be pushed: ");
scanf("%d",&x);
TOP++;
STK[TOP]= x;
}
}
//Function to perform POP Operation
void Pop()
{
if (TOP < 0)
{
61:1
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
EXP1DSA.C
if (TOP < 0)
{
printf("Stack Underflow \n");
}
else
{
printf("The popped element is: %d \n",STK[TOP]);
TOP--;
}
}
//Function to perform PEEP Operation
void Peep()
{
printf("Enter the position of the element from the top which you want to pee
scanf("%d", &i);
if(TOP - i + 1 < 0)
{
printf("Stack Underflow on Peep \n");
}
else
80:1
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
EXP1DSA.C
else
{
printf("The %d element from the top is: %d \n",i,STK[TOP-i+1]);
}
}
//Function to DISPLAY the Stack
void Display()
{
if(TOP < 0)
{
printf("Stack is empty \n");
}
else
{
printf("The element in the stack are:");
for (i = TOP; i> -1; i--)
{
printf("\n %d \n", STK[i]);
}
}
100:1
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu


File Edit Search Run Compile Debug Project Options Window Help
EXP1DSA.C
//Function to DISPLAY the Stack
void Display()
{
if(TOP < 0)
{
printf("Stack is empty \n");
}
else
{
printf("The element in the stack are:");
for (i = TOP; i> -1; i--)
{
printf("\n %d \n", STK[i]);
}
}
getch();
}
106:1
F1 Help F2 Save F3 Open Alt-F9 Compile F9 Make F10 Menu

```
        WELCOME to Implementation of STACK using array !!
Enter size of Stack (Maximum size = 100): 4

 Stack Operation Available:
       1.Push   2.Pop   3.Peep  4.Display      5.Exit

 Enter your choice: 1
Enter the element to be pushed: 3

 Stack Operation Available:
       1.Push   2.Pop   3.Peep  4.Display      5.Exit

 Enter your choice: 1
Enter the element to be pushed: 5

 Stack Operation Available:
       1.Push   2.Pop   3.Peep  4.Display      5.Exit

 Enter your choice: 4
The element in the stack are:
 5

 3
_
```

```
The element in the stack are:
 5

 3

 Stack Operation Available:
        1.Push   2.Pop   3.Peep  4.Display       5.Exit

 Enter your choice: 2
The popped element is: 5

 Stack Operation Available:
        1.Push   2.Pop   3.Peep  4.Display       5.Exit

 Enter your choice: 3
Enter the position of the element from the top which you want to peep: 3
Stack Underflow on Peep

 Stack Operation Available:
        1.Push   2.Pop   3.Peep  4.Display       5.Exit

 Enter your choice: 4
The element in the stack are:
 3
_
```