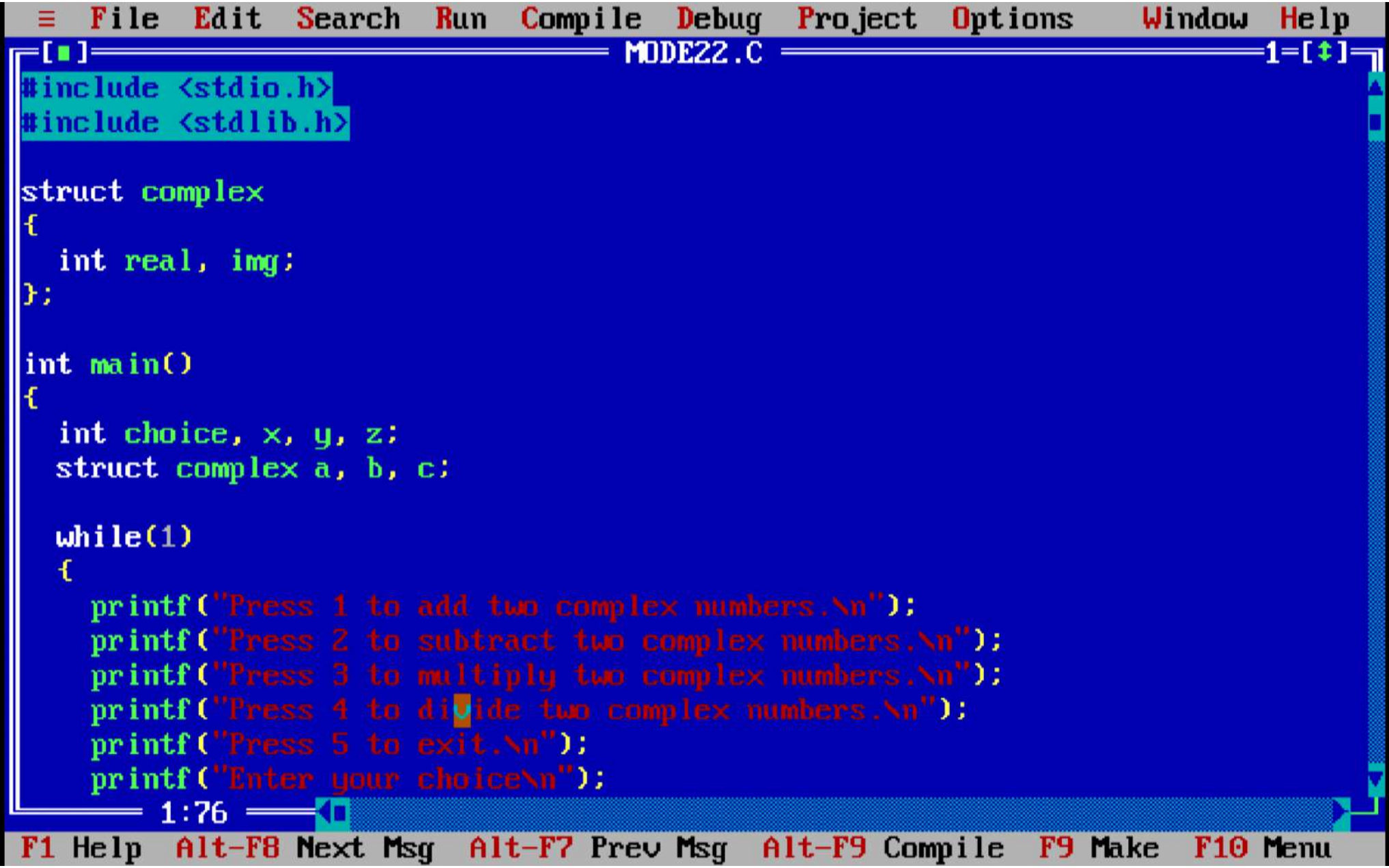
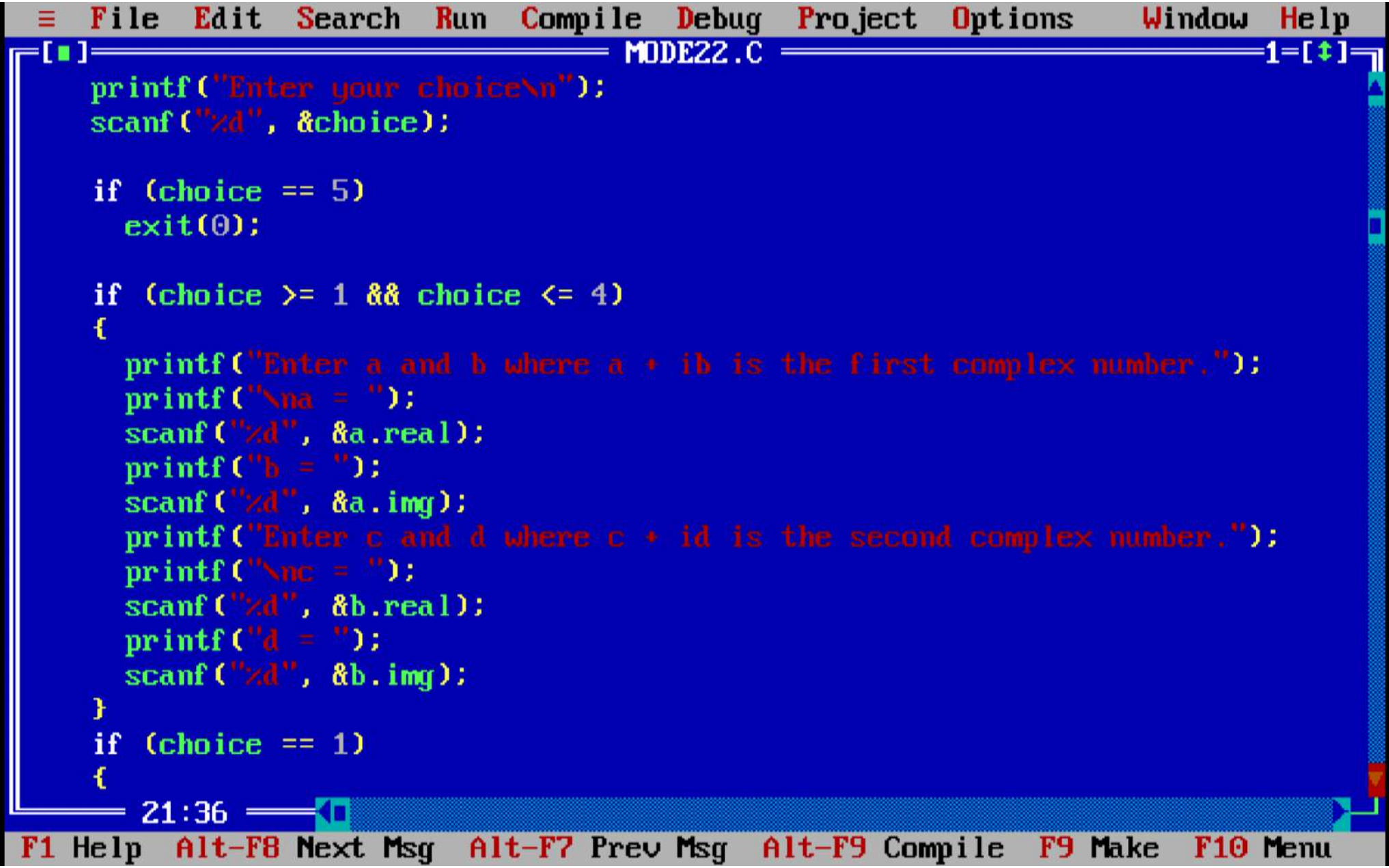
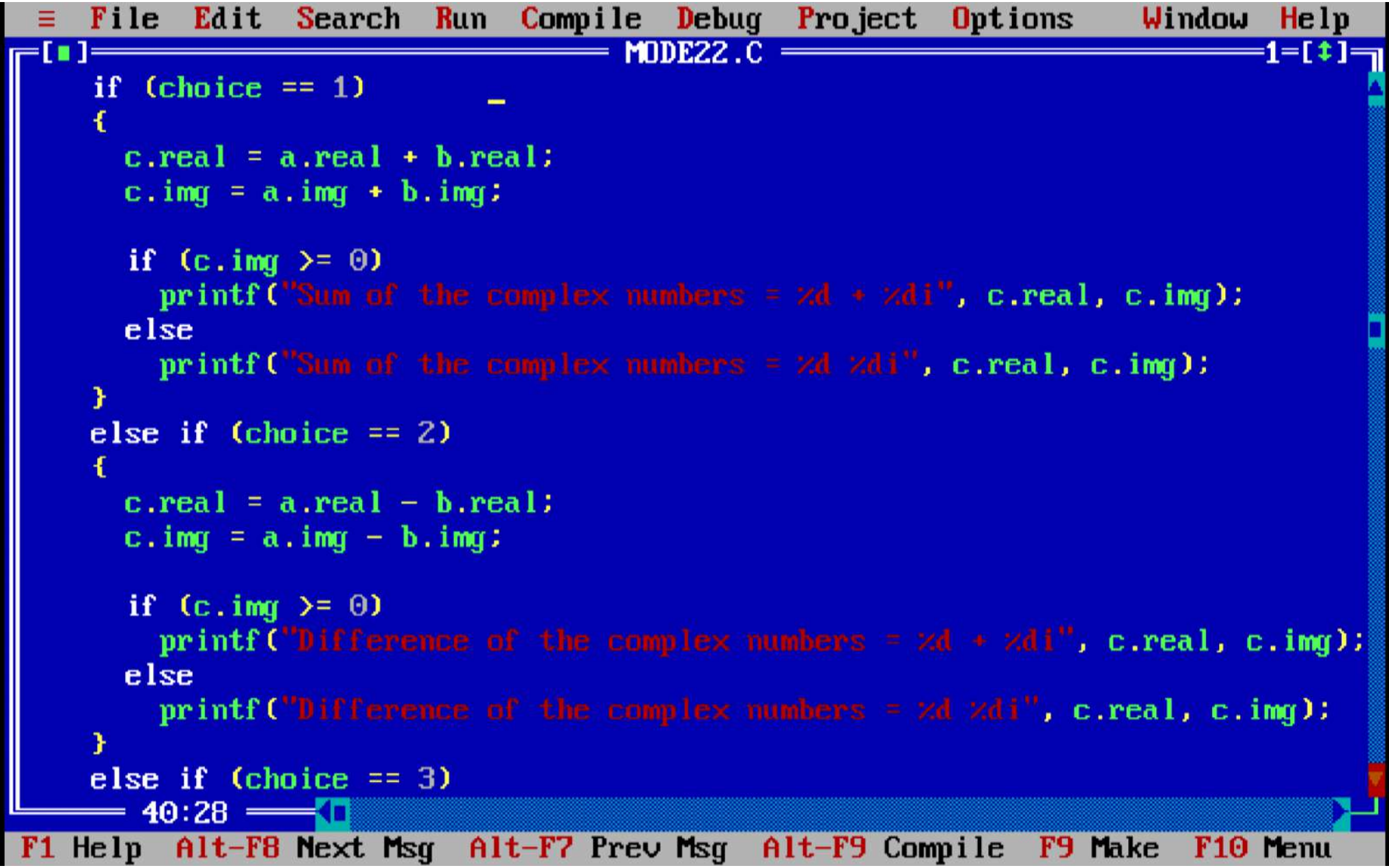
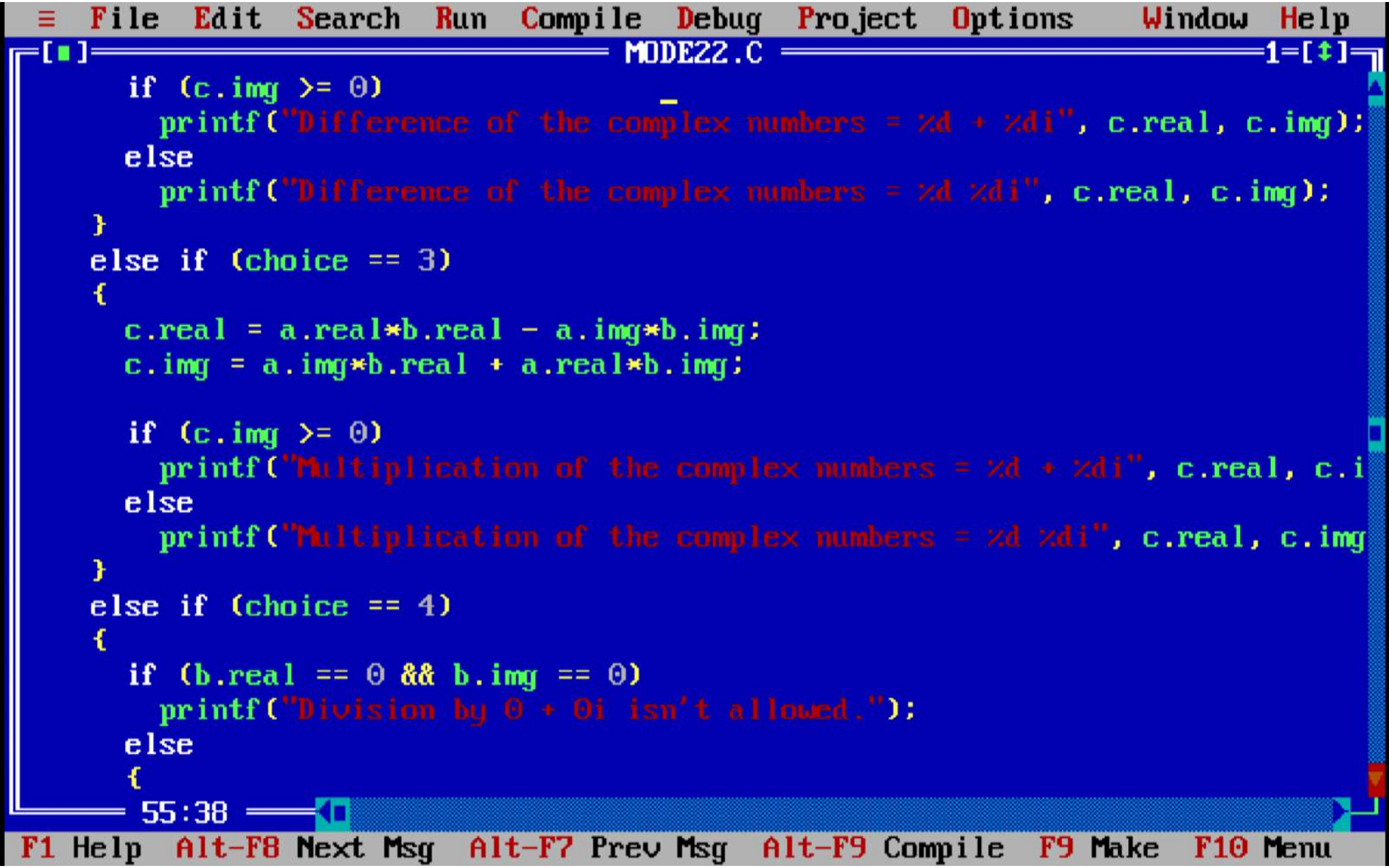
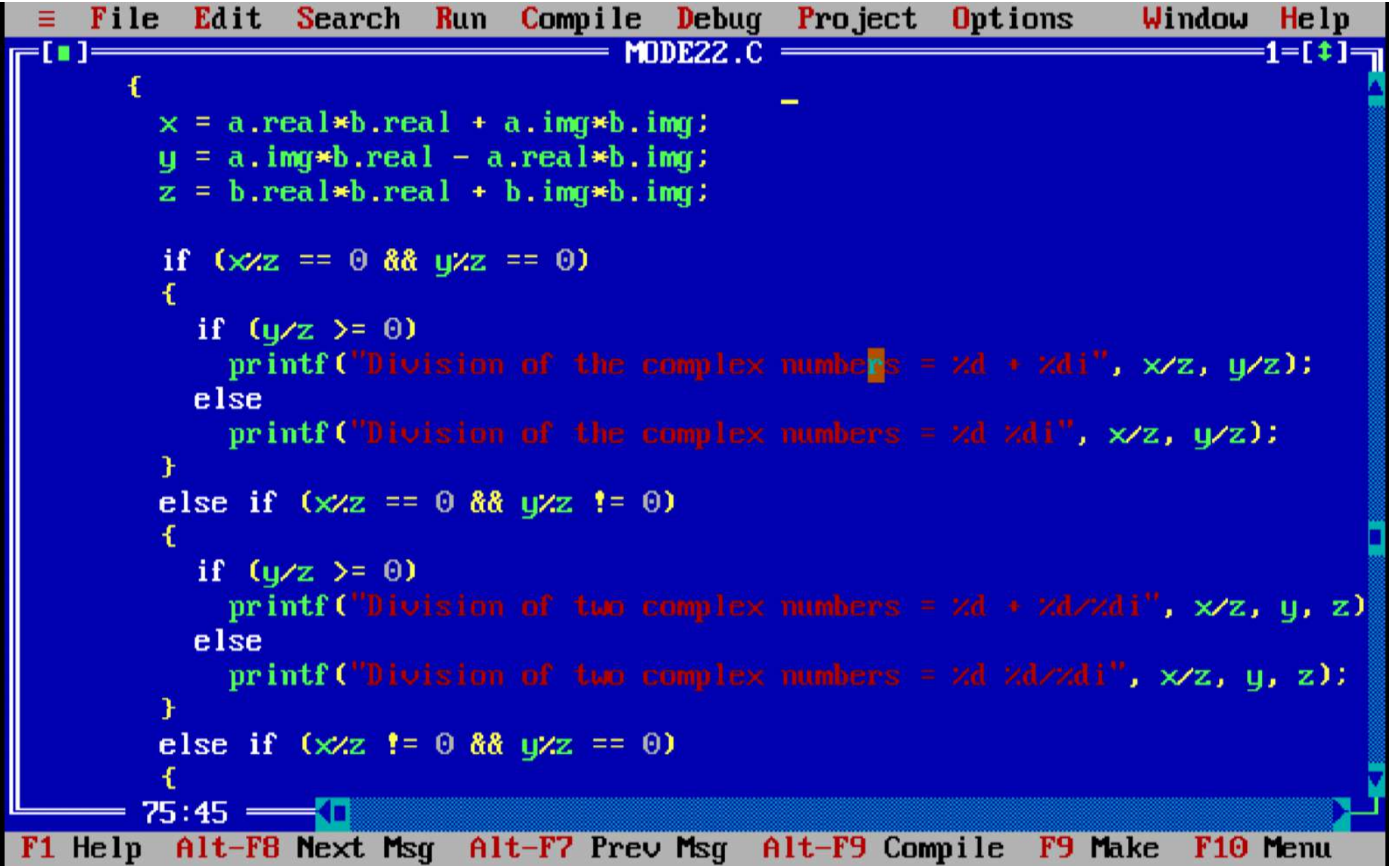
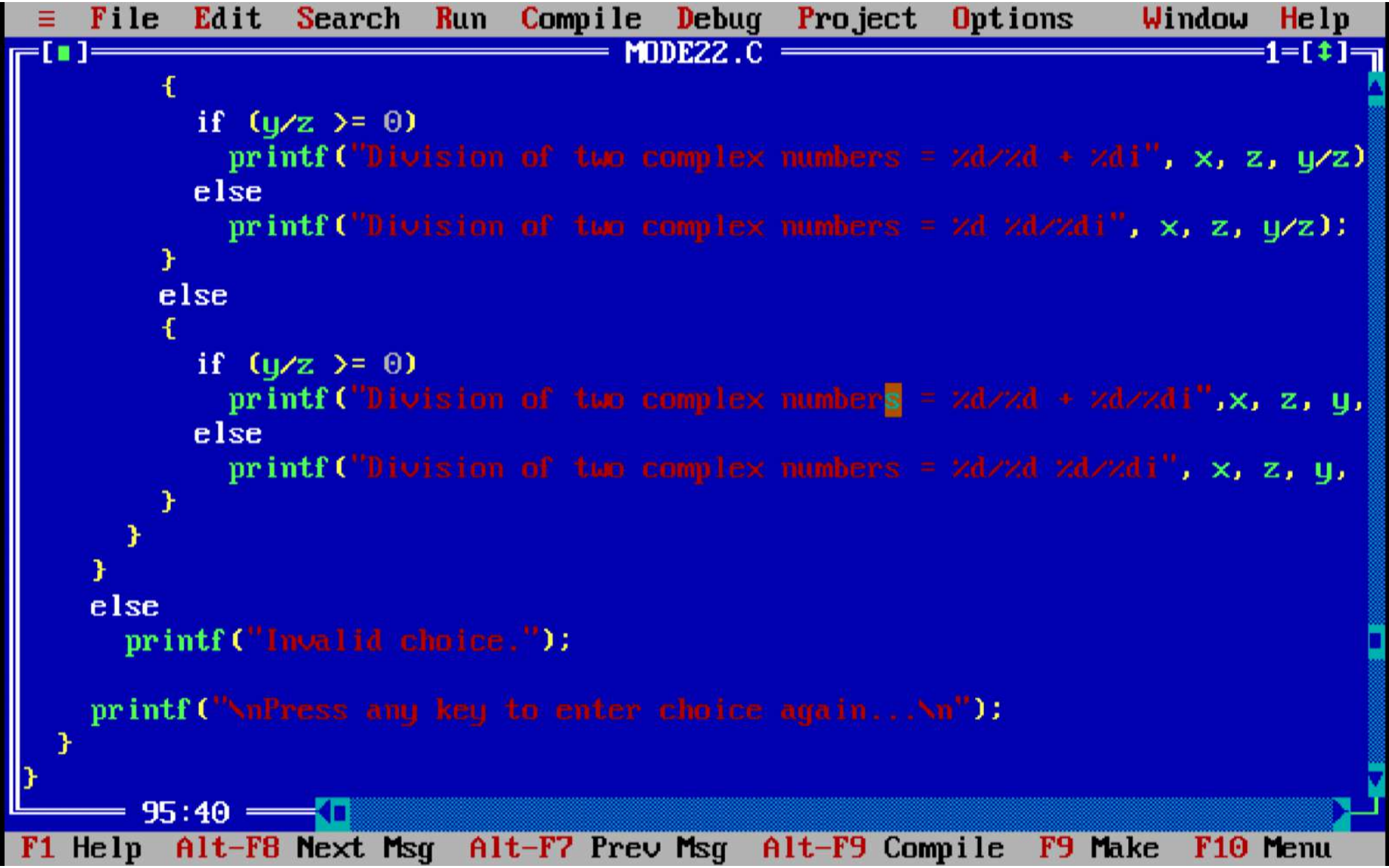

File Edit Search Run Compile Debug Project Options Window Help
MODE22.C
#include <stdio.h>
#include <stdlib.h>
struct complex
{
int real, img;
};
int main()
{
int choice, x, y, z;
struct complex a, b, c;
while(1)
{
printf("Press 1 to add two complex numbers.\n");
printf("Press 2 to subtract two complex numbers.\n");
printf("Press 3 to multiply two complex numbers.\n");
printf("Press 4 to divide two complex numbers.\n");
printf("Press 5 to exit.\n");
printf("Enter your choice\n");
1:76
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
MODE22.C
printf("Enter your choice\n");
scanf("%d", &choice);
if (choice == 5)
exit(0);
if (choice >= 1 && choice <= 4)
{
printf("Enter a and b where a + ib is the first complex number.");
printf("\na = ");
scanf("%d", &a.real);
printf("b = ");
scanf("%d", &a.img);
printf("Enter c and d where c + id is the second complex number.");
printf("\nc = ");
scanf("%d", &b.real);
printf("d = ");
scanf("%d", &b.img);
}
if (choice == 1)
{
21:36
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
MODE22.C
if (choice == 1)
{
c.real = a.real + b.real;
c.img = a.img + b.img;
if (c.img >= 0)
printf("Sum of the complex numbers = %d + %di", c.real, c.img);
else
printf("Sum of the complex numbers = %d %di", c.real, c.img);
}
else if (choice == 2)
{
c.real = a.real - b.real;
c.img = a.img - b.img;
if (c.img >= 0)
printf("Difference of the complex numbers = %d + %di", c.real, c.img);
else
printf("Difference of the complex numbers = %d %di", c.real, c.img);
}
else if (choice == 3)
40:28
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
MODE22.C
if (c.img >= 0)
printf("Difference of the complex numbers = %d + %di", c.real, c.img);
else
printf("Difference of the complex numbers = %d %di", c.real, c.img);
}
else if (choice == 3)
{
c.real = a.real*b.real - a.img*b.img;
c.img = a.img*b.real + a.real*b.img;
if (c.img >= 0)
printf("Multiplication of the complex numbers = %d + %di", c.real, c.i
else
printf("Multiplication of the complex numbers = %d %di", c.real, c.img
}
else if (choice == 4)
{
if (b.real == 0 && b.img == 0)
printf("Division by 0 + 0i isn't allowed.");
else
{
55:38
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
MODE22.C
{
x = a.real*b.real + a.img*b.img;
y = a.img*b.real - a.real*b.img;
z = b.real*b.real + b.img*b.img;
if (x%z == 0 && y%z == 0)
{
if (y/z >= 0)
printf("Division of the complex numbers = %d + %di", x/z, y/z);
else
printf("Division of the complex numbers = %d %di", x/z, y/z);
}
else if (x%z == 0 && y%z != 0)
{
if (y/z >= 0)
printf("Division of two complex numbers = %d + %d/%di", x/z, y, z)
else
printf("Division of two complex numbers = %d %d/%di", x/z, y, z);
}
else if (x%z != 0 && y%z == 0)
{
75:45
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
MODE22.C
{
if (y/z >= 0)
printf("Division of two complex numbers = %d/%d + %di", x, z, y/z)
else
printf("Division of two complex numbers = %d %d/%di", x, z, y/z);
}
else
{
if (y/z >= 0)
printf("Division of two complex numbers = %d/%d + %d/%di",x, z, y,
else
printf("Division of two complex numbers = %d/%d %d/%di", x, z, y,
}
}
}
else
printf("Invalid choice.");
printf("\nPress any key to enter choice again...\n");
}
}
95:40
F1 Help Alt-F8 Next Msg Alt-F7 Prev Msg Alt-F9 Compile F9 Make F10 Menu

```
C:\TURBOC3\BIN>TC
Press 1 to add two complex numbers.
Press 2 to subtract two complex numbers.
Press 3 to multiply two complex numbers.
Press 4 to divide two complex numbers.
Press 5 to exit.
Enter your choice
1
Enter a and b where a + ib is the first complex number.
a = 2
b = 3
Enter c and d where c + id is the second complex number.
c = 4
d = 5
Sum of the complex numbers = 6 + 8i
Press any key to enter choice again...
Press 1 to add two complex numbers.
Press 2 to subtract two complex numbers.
Press 3 to multiply two complex numbers.
Press 4 to divide two complex numbers.
Press 5 to exit.
Enter your choice
_
```