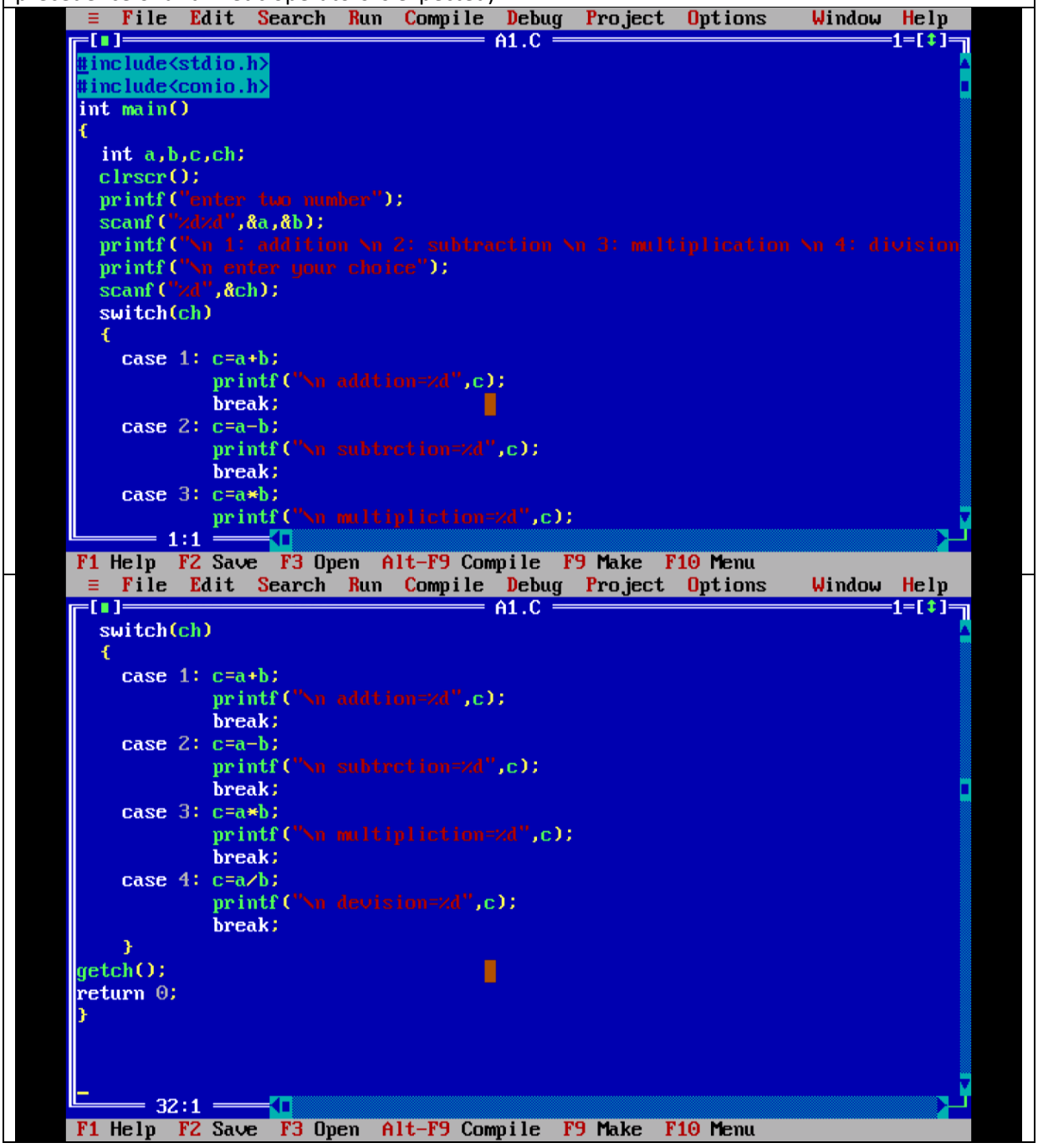
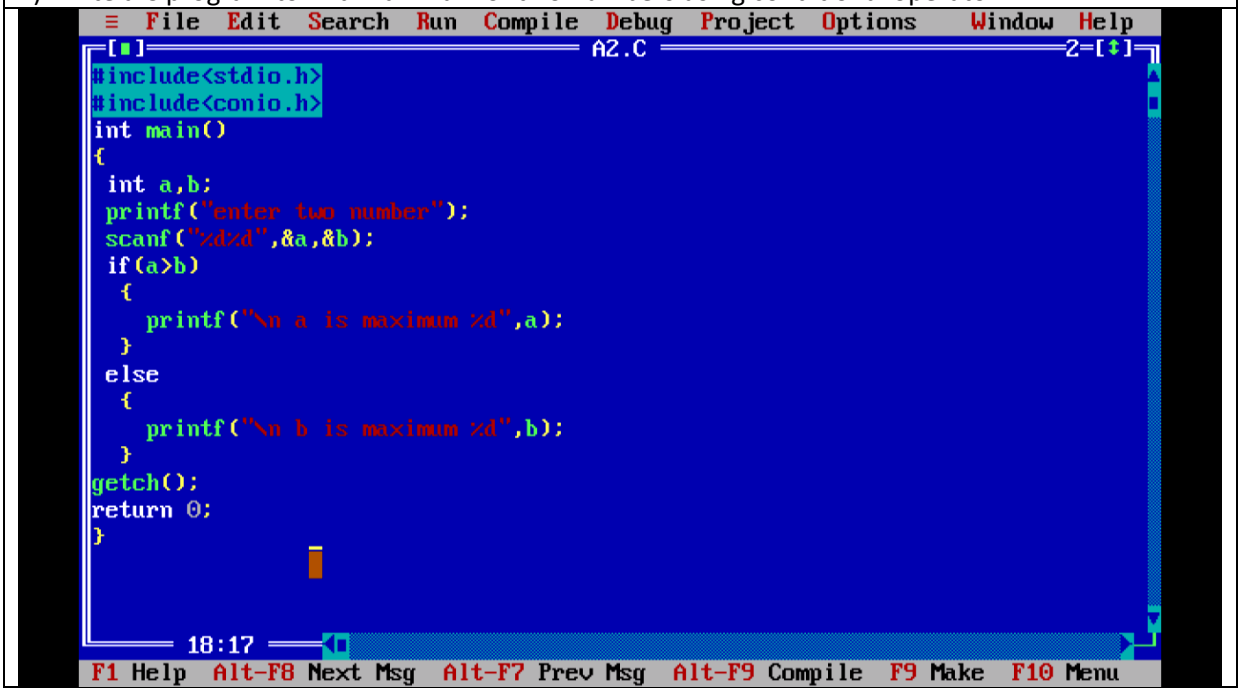
Assienment 1 c progamining (LAB BOOK)

1) Write a C Program to demonstrate the working of arithmetic operators (Associativity and precedence of arithmetic operators is expected)



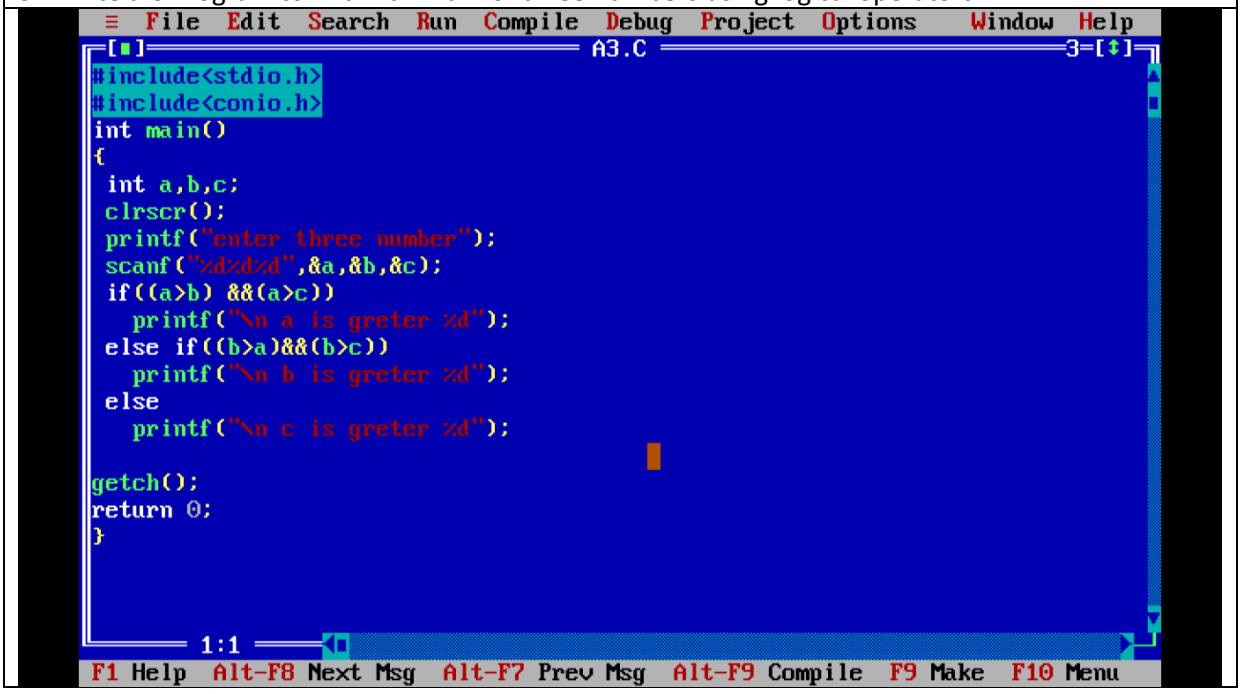
```
enter two number 500 500

 1: addition
 2: subtraction
 3: multiplication
 4: division
 enter your choice 1

 addition=1000_
```

2) Write a C program to find maximum of two numbers using conditional operator.



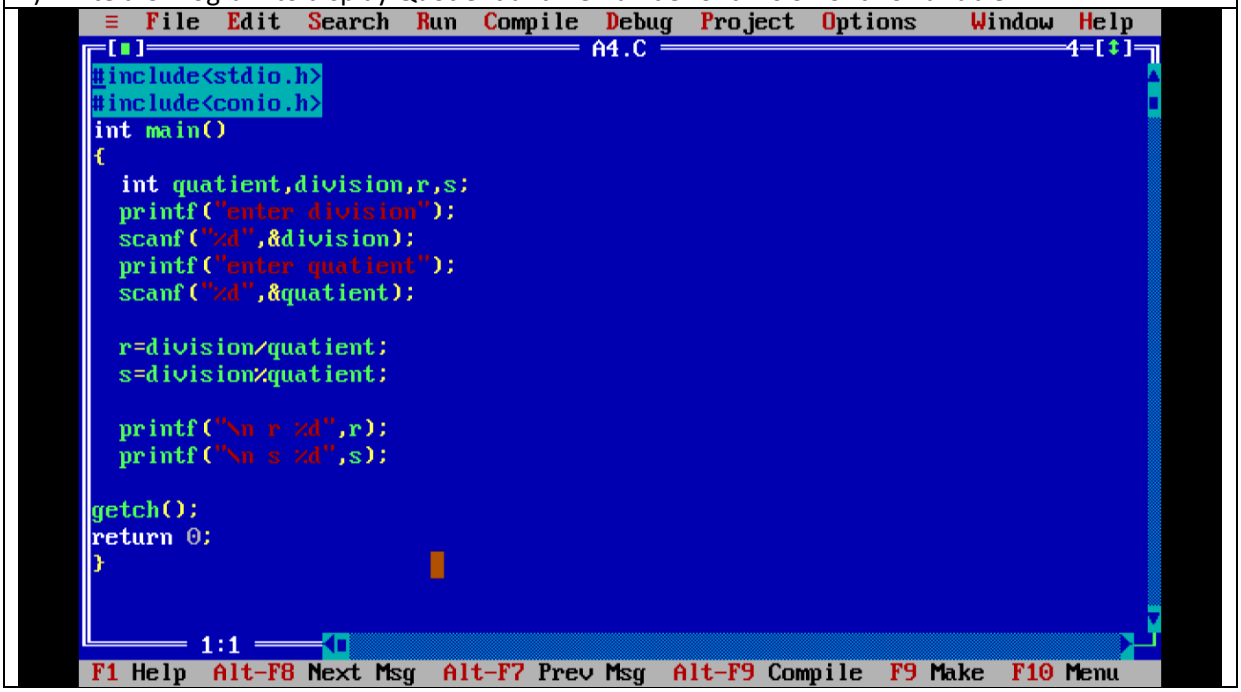
```
enter two number 23 45

 b is maximum 45
```

3 . Write a C Program to find maximum of three numbers using logical operators.



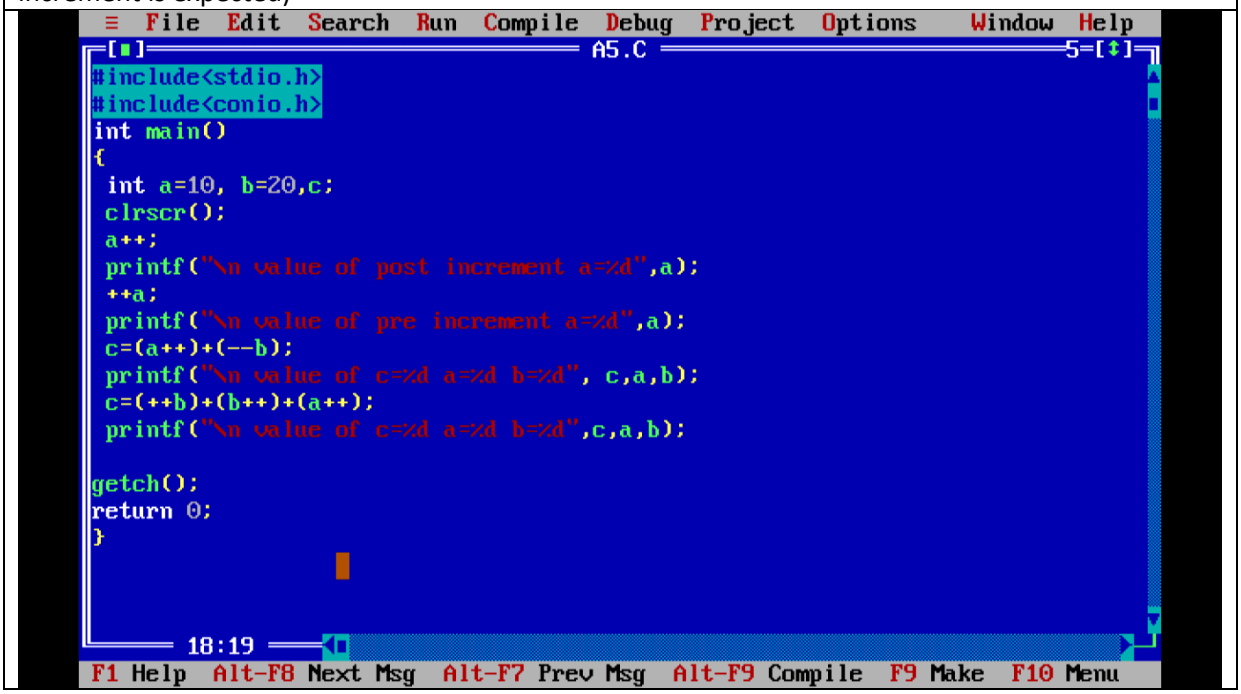
```
enter three number 23 45 67

 c is greter 67_
```

4) Write a C Program to display Quotient and Remainder of division of two variable.



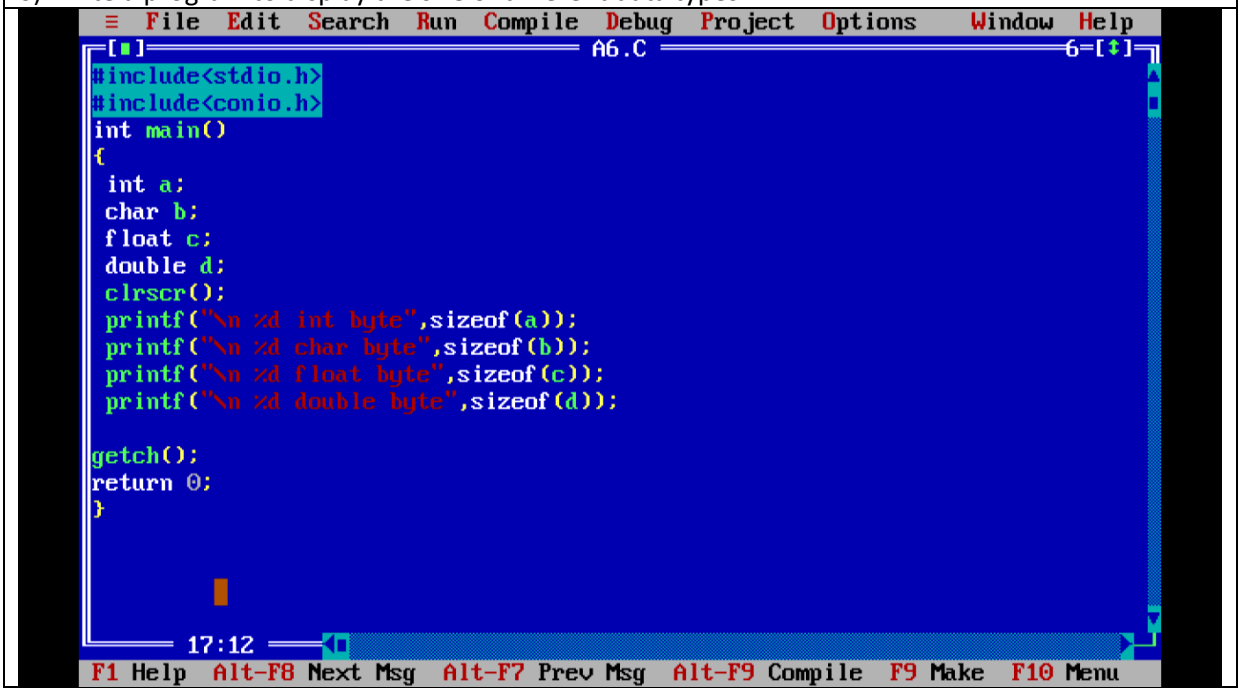
```
enter division 45
enter quatient 23

 r 1
 s 22
```

5) Write a C Program which illustrate increment and decrement operators (Use of Pre and Post increment is expected)



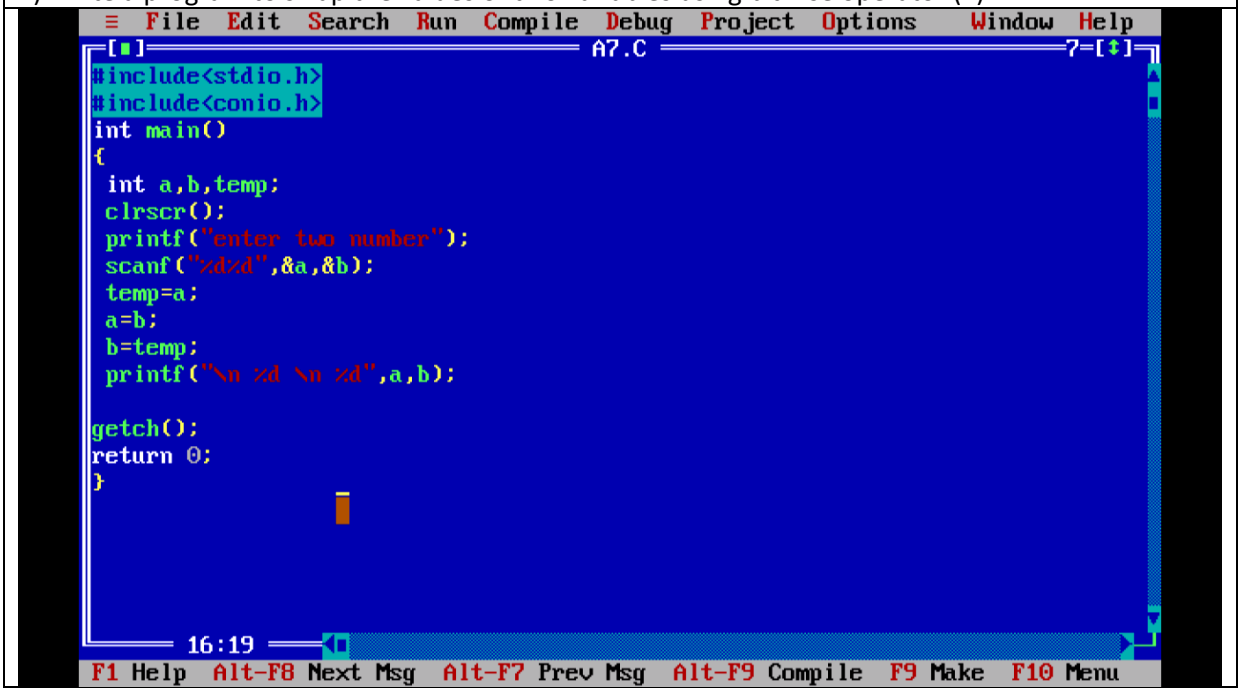
```
value of post increment a=11
value of pre increment a=12
value of c=31 a=13 b=19
value of c=53 a=14 b=21_
```

6) Write a program to display the size of different data types.



```
2 int byte
1 char byte
4 float byte
8 double byte
```

7) Write a program to swap the values of two variables using bitwise operator (^)



```
enter two number 55 22

 22
 55
```

8) Write a C program which illustrate the use of Bitwise And. Bitwise Or and Bitwise XOR Operator).

```
≡ File  Edit  Search  Run  Compile  Debug  Project  Options    Window  Help
[■]═══════════════════ A8.C ═══════════════════8=[↕]
#include<stdio.h>
#include<conio.h>
int main()
{
 int a,b,res;
 clrscr();
 printf("\n enter 2 number");
 scanf("%d%d",&a,&b);
 res=a&b;
 printf("\n a&b=%d",res);
 res=a|b;
 printf("\n a|b=%d",res);
 res=a^b;
 printf("\n a^b=%d",res);
 res=a<<3;
 printf("\n left shift of a a<<3=%d",res);
 res=~a;
 printf("\n ones compliment of a=%d",res);

getch();
return 0;
═══ 1:1 ═══
F1 Help  F2 Save  F3 Open  Alt-F9 Compile  F9 Make  F10 Menu
```

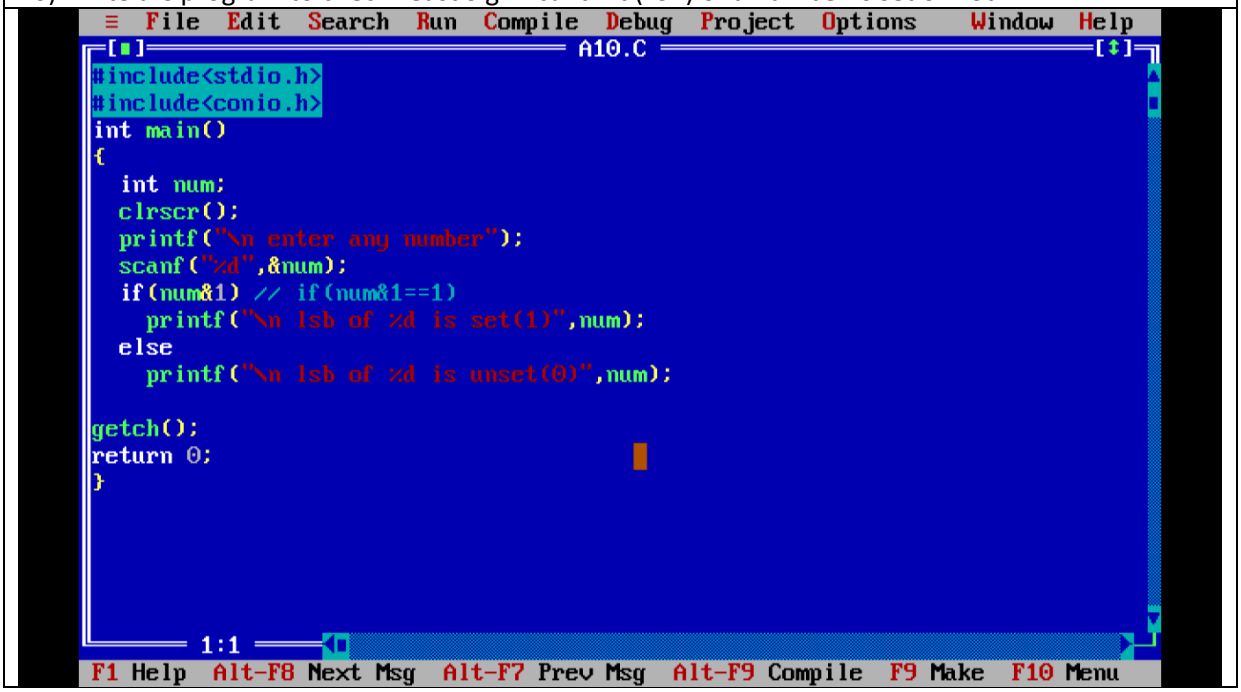
```
enter 2 number 55 11

a&b=3
a|b=63
a^b=60
left shift of a a<<3=440
ones compliment of a=-56_
```

9) Write a C program which illustrate Bitwise Left shift and Right Shift operators.

```
 ≡  File  Edit  Search  Run  Compile  Debug  Project  Options    Window  Help
[■]═══════════════════ A9.C ═══════════════════9=[↕]
#include<stdio.h>
#include<conio.h>
int main()
{
 int a,res;
 clrscr();
 printf("\n enter two number");
 scanf("%d%d",&a,&res);
 res=a<<3;
 printf("\n left shift of a a<<3=%d",res);
 res=a>>2;
 printf("\n right shift of a a>>2=%d",res);

getch();
return 0;
}
                 _
═══ 17:16 ═══◄■
F1 Help  Alt-F8 Next Msg  Alt-F7 Prev Msg  Alt-F9 Compile  F9 Make  F10 Menu
```

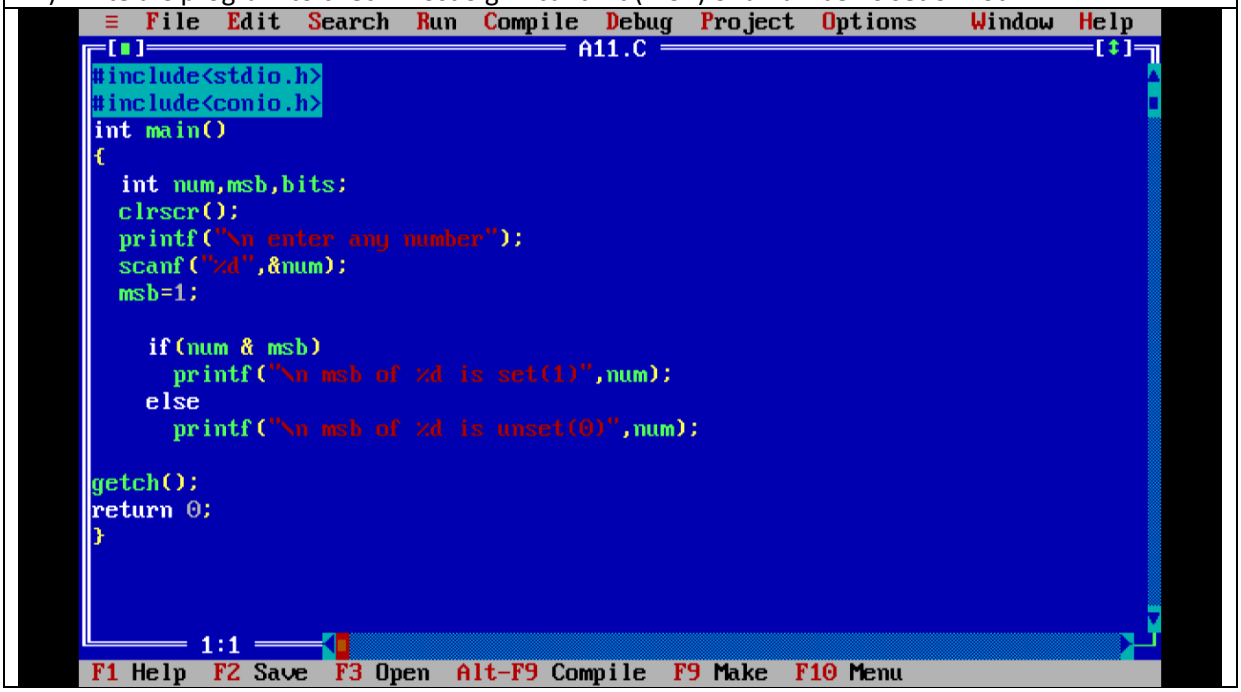
```
enter two number 10 20

left shift of a a<<3=80
right shift of a a>>2=2
```

10) Write a C program to check Least Significant Bit (LSB) of a number is set or not.



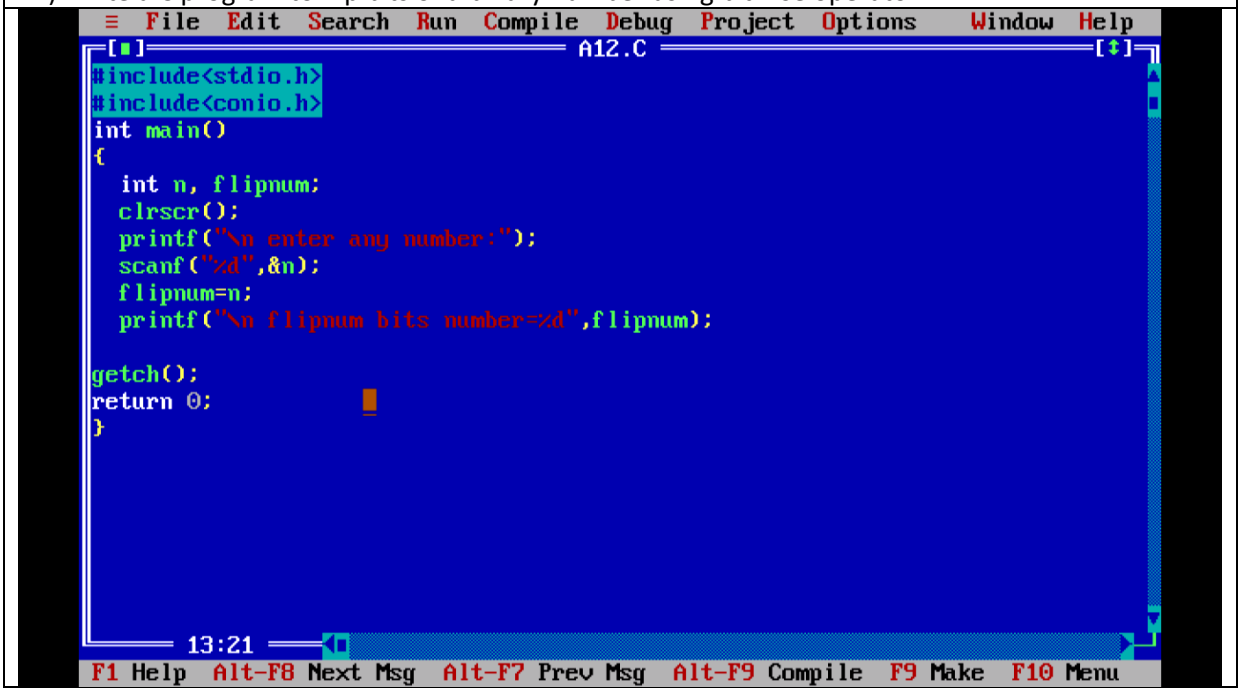
```
enter any number 54

lsb of 54 is unset(0)
```

11) Write a C program to check Most Significant Bit (MSB) of a number is set or not.



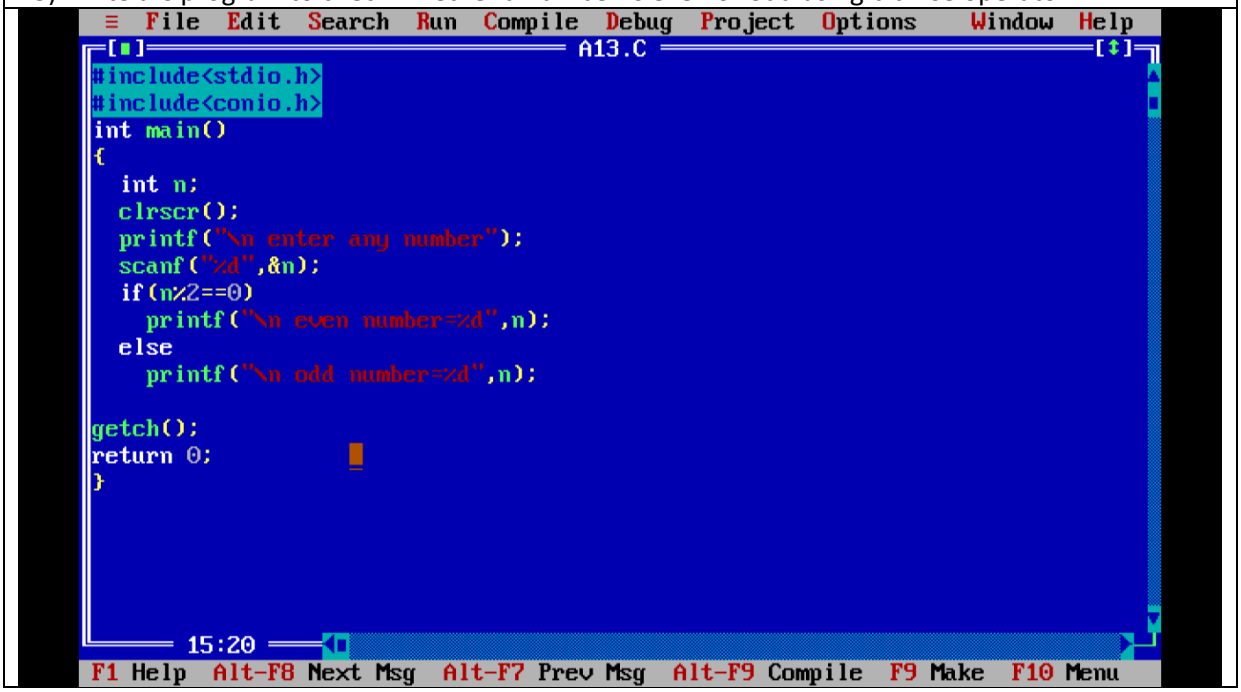
```
enter any number 45

msb of 45 is set(1)
```

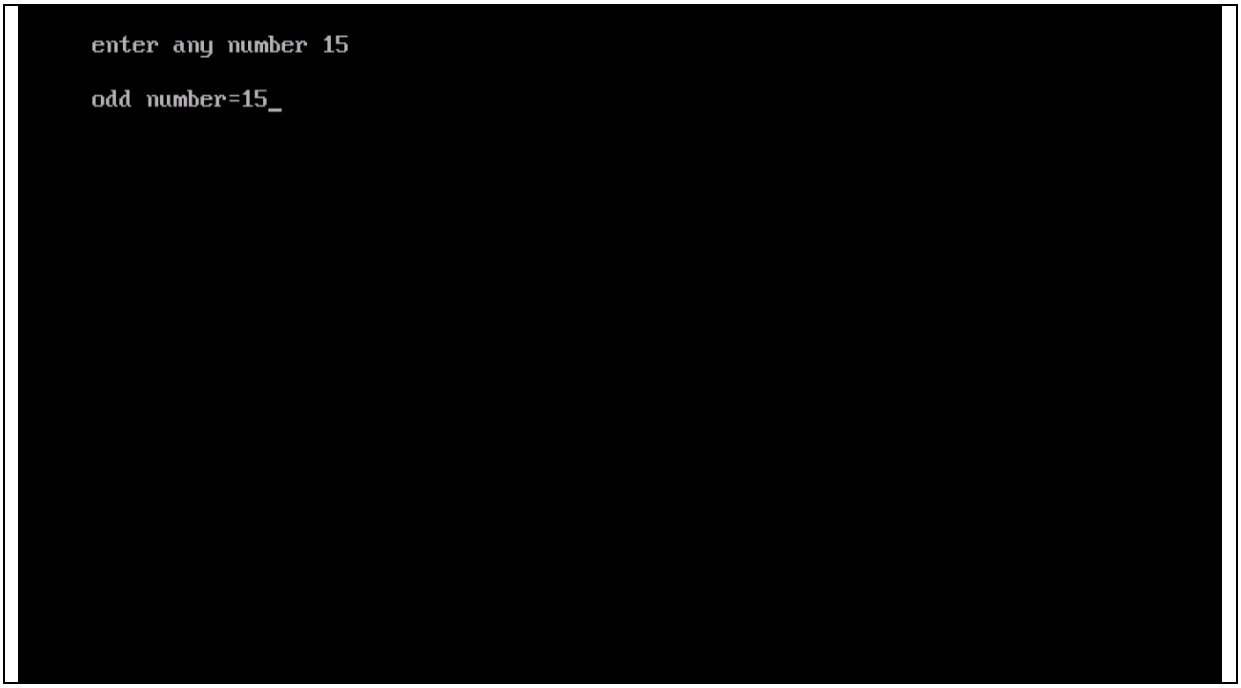
12) Write a C program to flip bits of a binary number using bitwise operator.



```
enter any number: 78

flipnum bits number=78_
```

13) Write a C program to check whether a number is even or odd using bitwise operator.




enter any number 15
odd number=15_