Goto Statement
C supports a unique form of a statement that is the goto Statement which is used to branch unconditionally within a program from one point to another. Although it is not a good habit to use the goto statement in C, there may be some situations where the use of the goto statement might be desirable. The goto statement is used by programmers to change the sequence of execution of a C program by shifting the control to a different part of the same program.

'goto' Statement in C language
goto is a jumping statement in c language, which transfer the program’s control from one statement to another statement (where label is defined).
goto can transfer the program’s within the same block and there must a label, where you want to transfer program’s control.

Defining a label
Label is defined following by the given syntax

label_name:
- label_name should be a valid identifier name.
- : (colon) should be used after the label_name.

Transferring the control using ‘goto’
Program’s control can be transfer following by the given syntax
goto label_name;

Two styles of ‘goto’ statement
We can use goto statement to transfer program’s control from down to top (↑) and top to down (↓).

Transferring the control from down to top
label-name:
    statement1;
    statement2;
    ..
    if(any-test-condition)
        goto label-name;

Here, if any-test-condition is true, goto will transfer the program’s control to the specified label-name.

Example1 :  To print numbers from 1 to 10 using goto statement
#include <stdio.h>
void main()
{
    int number;
    number=1;
    top:
        printf("%d\n",number);
        number++;
        if(number<=10)
            goto top;
}
Transferring the control from top to down
statements;
   if(any-test-condition)
       goto label-name;
statement1;
statement2;
label-name:
       Other statements;

Here, if any-test-condition is true, goto will transfer the program’s control to the specified label-name.

Example 2:  To read and print the number, if number is positive only.
#include <stdio.h>
void main()
{
    int number;
    printf("Enter an integer number: ");
    scanf("%d",&number);
    if(number<=0)
        goto end;
    printf("Number is : %d", number);
end:
    printf("Bye Bye !!!");
}

Output
First run:
Enter an integer number: 123
Number is : 123
Bye Bye !!!

Second run:
Enter an integer number: 0
Bye Bye !!!

Example 3:  Program to check which digit number is given by the user using goto statement.
#include <stdio.h>
#include<conio.h>
main()
{
    int x,i=0;
    clrscr();
    printf("enter any digit no.");
    scanf("%d",&x);
abc:
if(x!=0)
{
i++;
x/=10;
goto abc;
}
else
printf("number=%d Digit No.",i);
getch();
}

Example 4: 
Program to print the factorial value of any number using goto keyword
#include<stdio.h>
#include<conio.h>
void main()
{
int x,y=1;
clrscr();
printf("Enter any number \n");
scanf("%d",&x);
fact:
y=y*x;
if(x>1)
{
x--;
goto fact;
}
printf("%d",y);
getch();
}

Try Yourself:
1. Write a program to input any number and print the table of that number using goto statement.
2. Write a program to input any digit number and print the reverse of that digit using goto statement.
3. Write a program to print the sum of one to nth numbers using goto statement.