



SNS COLLEGE OF TECHNOLOGY

Coimbatore-35
An Autonomous Institution

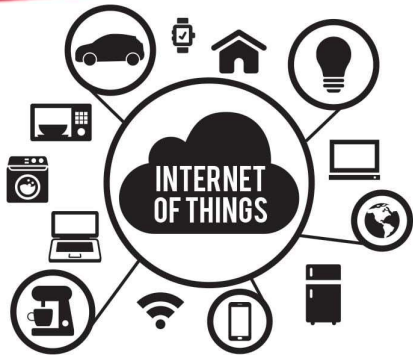


Department of Information Technology

23CST101 - PROBLEM SOLVING and C PROGRAMMING

I B.Tech. IT/ I SEMESTER

UNIT II : C PROGRAMMING BASICS



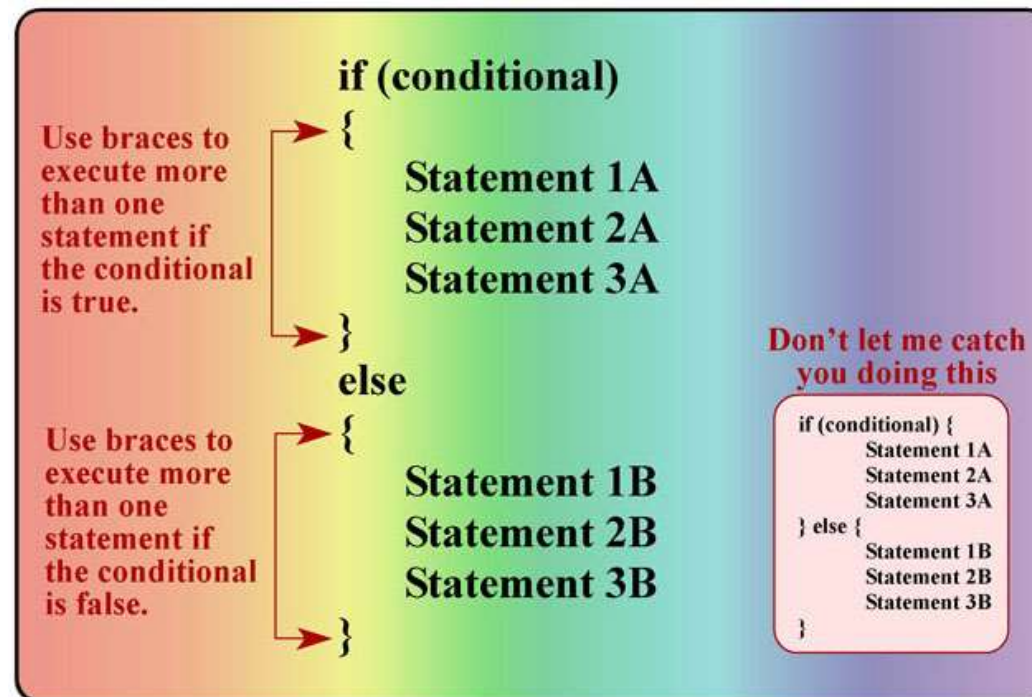
Introduction to 'C' Programming –Fundamental rules – Structure of a 'C' program – Compilation and Linking processes –Constants, Variables, keywords, Identifier, Delimiters – Declaring and Initializing variables – Data Types – Operators and Expressions –Managing Input and Output operations – Decision Making and Branching –Looping



Decision Making Statement

- The **conditional statements** (also known as decision control structures) such as if, if else, switch, etc. are used for decision-making purposes in C programs.
- They are also known as Decision-Making Statements and are used to evaluate one or more conditions and make the decision whether to execute a set of statements or not.
- These decision-making statements in programming languages decide the direction of the flow of program execution.

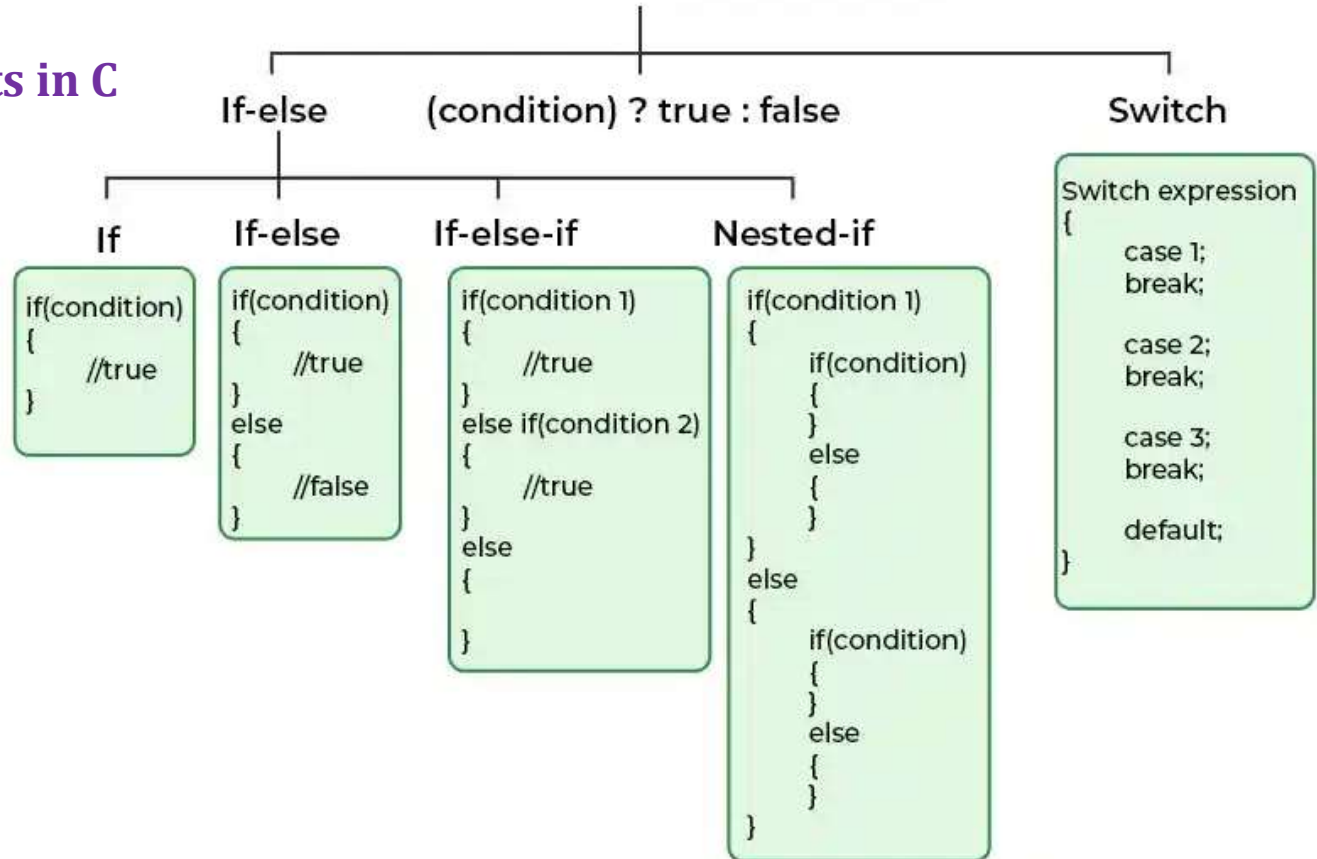
Need of Conditional Statements



Conditional Statements in C

Types of Conditional Statements in C

- 1.if Statement
- 2.if-else Statement
- 3.Nested if Statement
- 4.if-else-if Ladder
- 5.switch Statement
- 6.Conditional Operator
- 7.Jump Statements:
 1. break
 2. continue
 3. goto
 4. return





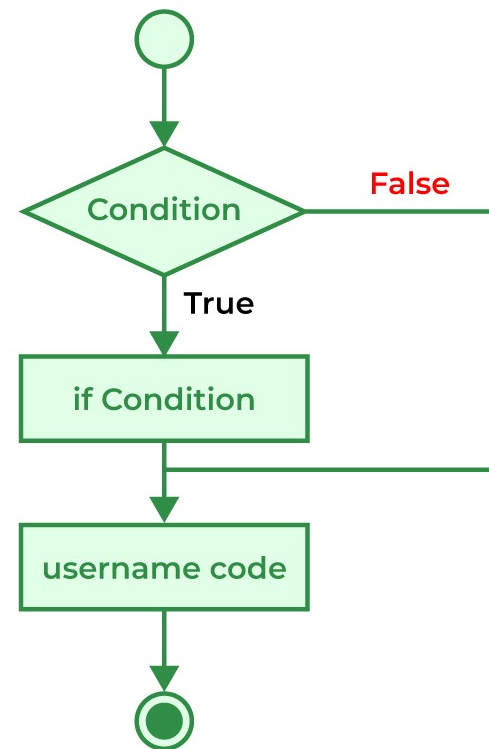
If statement

- The if statement is the most simple decision-making statement.
- It is used to decide whether a certain statement or block of statements will be executed or not
- i.e if a certain condition is true then a block of statements is executed otherwise not.

```
if(condition)
{
    // Statements to execute if
    // condition is true
}
```

If statement

```
if(condition)  
{  
    // Statements to execute if  
    // condition is true  
}
```





Write a program to check whether the entered number is less than 10? if yes, display the same

```
#include<stdio.h>
int main()
{
    int num;
    printf("Enter Any Number : ");
    scanf("%d",&num);
    if(num<10)
        printf("\n%d is Less Than 10",num);
    return 0;
}
```

```
Enter Any Number : 5
5 is Less Than 10
```



Write a program to check equivalence of two numbers. Use if Statement

```
#include<stdio.h>
int main()
{
    int m,n;
    printf("Enter Two Number : ");
    scanf("%d %d",&m,&n);
    if(m-n==0)
        printf("\nThe two numbers are equal);
    return 0;
}
```

```
#include <stdio.h>
void main()
{
    int m, n;

    printf("Enter the values for M and N\n");
    scanf("%d %d", &m, &n);
    if (m == n)
        printf("M and N are equal\n");
    else
        printf("M and N are not equal\n");
}
```



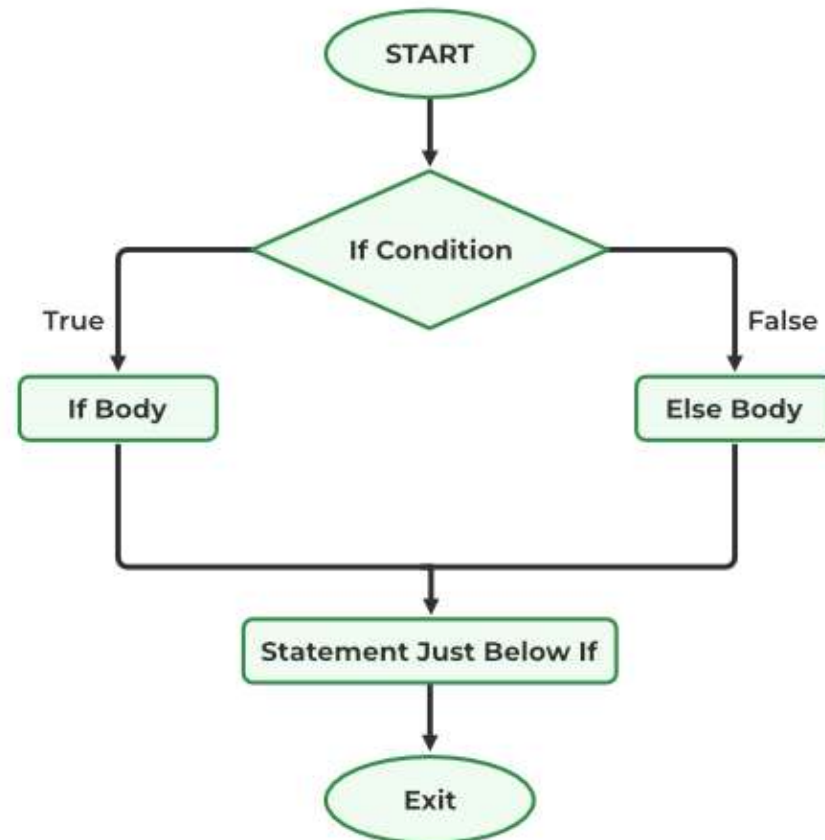

If statement

- Write a Program to check whether the candidate's age is greater than 18 or not. If yes, display message "Eligible for Voting".

```
#include <stdio.h>
int main()
{
    int age;
    printf("Enter age : ");
    scanf("%d", &age);
    if (age >= 18)
        printf("You can Vote!");
    else
        printf("You cant Vote!");
    return 0;
}
```

If else statement

```
if (condition)
{
    // Executes this block if
    // condition is true
}
else
{
    // Executes this block if
    // condition is false
}
```





References

- <https://www.programiz.com/c-programming/c-operators>



Thank You!