Basic of C Programming

DECISION MAKING AND BRANCHING

Conditional Statement in C -

• In C programming, if statement is used to test the condition. There are various types of if statements in C.

•	Simple if statement	•	Nested if-else statement
•	if-else statement	•	if-else-if ladder

• **Simple If Statement** - The C if statement tests the condition. It is executed if condition is true.

```
Syntax -
        if(condition)
        {
                  //code to be executed
        }
```

Source Code of Simple - if statement -

```
#include<stdio.h>
#include<conio.h>
void main ()
      int num = 10;
      if (num \% 2 == 0)
        printf("It is even number");
```

If-else Statement -

• The C if-else statement also tests the condition. It executes if block if condition is true otherwise else block is executed.

```
Syntax -
       if(condition)
          //code if condition is true
       else
          //code if condition is false
```

Source Code of if-else statement -

```
#include<stdio.h>
#include<conio.h>
void main ()
      int num = 10;
      if (num % 2 == 0) {
        printf("It is even number";
     else {
       printf("It is odd number";
```

Nested if-else Statement -

A nested if is an if statement that is the target of another if statement.
 Nested if statements means an if statement inside another if statement.

```
Syntax –
        if (condition1)
                   // Executes when condition1 is true
                   if (condition2) {
                          // Executes when condition2 is true
                   else {
                           // Executes when condition2 is false
```

Source Code of if-else statement -

```
#include<stdio.h>
#include<conio.h>
void main()
       int i = 10;
       if (i == 10) {
              if (i < 15) {
                      printf("i is smaller than 15";
              if (i < 12) {
                      printf("i is smaller than 12 too";
              else {
                      printf("i is greater than 15";
              }
```

