**if-else-if Statement in C++**

if-else-if statement is used when we need to check multiple conditions. In this control structure we have only one “if” and one “else”, however we can have multiple “else if” blocks. This is how it looks:

if(condition\_1) {

/\*if condition\_1 is true execute this\*/

statement(s);

}

else if(condition\_2) {

/\* execute this if condition\_1 is not met and

\* condition\_2 is met

\*/

statement(s);

}

else if(condition\_3) {

/\* execute this if condition\_1 & condition\_2 are

\* not met and condition\_3 is met

\*/

statement(s);

}

.

.

.

else {

/\* if none of the condition is true

\* then these statements gets executed

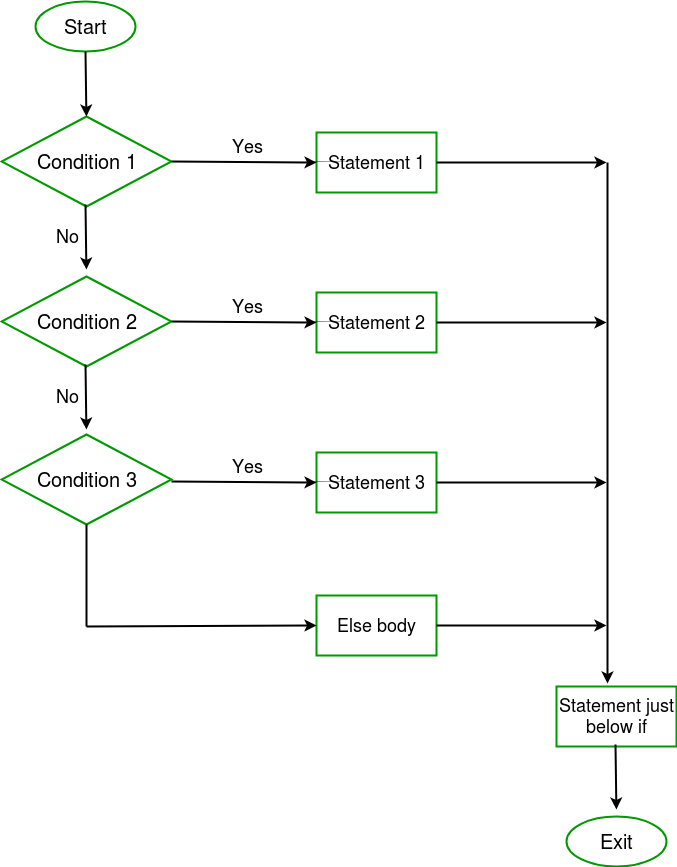
\*/

statement(s);

}

**Note:** The most important point to note here is that in if-else-if, as soon as the condition is met, the corresponding set of statements get executed, rest gets ignored. If none of the condition is met then the statements inside “else” gets executed.

Flow chart



**Example of if-else-if**

#include <iostream>

using namespace std;

int main(){

int num;

cout<<"Enter an integer number between 1 & 99999: ";

cin>>num;

if(num <100 && num>=1) {

cout<<"Its a two digit number";

}

else if(num <1000 && num>=100) {

cout<<"Its a three digit number";

}

else if(num <10000 && num>=1000) {

cout<<"Its a four digit number";

}

else if(num <100000 && num>=10000) {

cout<<"Its a five digit number";

}

else {

cout<<"number is not between 1 & 99999";

}

return 0;

}

**Output:**

Enter an integer number between 1 & 99999: 8976

Its a four digit number

Example

[Live Demo](http://tpcg.io/dhzcFk)

#include <iostream>

using namespace std;

int main () {

// local variable declaration:

int a = 100;

// check the boolean condition

if( a == 10 ) {

// if condition is true then print the following

cout << "Value of a is 10" << endl;

} else if( a == 20 ) {

// if else if condition is true

cout << "Value of a is 20" << endl;

} else if( a == 30 ) {

// if else if condition is true

cout << "Value of a is 30" << endl;

} else {

// if none of the conditions is true

cout << "Value of a is not matching" << endl;

}

cout << "Exact value of a is : " << a << endl;

return 0;

}

**Example 3: C++ Nested if...else**

// Program to check whether an integer is positive, negative or zero

#include <iostream>

using namespace std;

int main()

{

int number;

cout << "Enter an integer: ";

cin >> number;

if ( number > 0)

{

cout << "You entered a positive integer: " << number << endl;

}

else if (number < 0)

{

cout<<"You entered a negative integer: " << number << endl;

}

else

{

cout << "You entered 0." << endl;

}

cout << "This line is always printed.";

return 0;

}

**Output**

Enter an integer: 0

You entered 0.

This line is always printed.