

C++ 6_1

6.1 Conditional branching - if

if statement

An if statement contains a Boolean expression and block of statements enclosed within braces.

Structure of if statement

```
if (boolean expression )
```

```
/* if expression is true */
```

```
statements... ; /* Execute statements */
```

If the Boolean expression is true then statement block is executed otherwise (if false) program directly goes to next statement without executing Statement block.

if...else statement

If statement block with else statement is known as as if...else statement. Else portion is non-compulsory.

Structure of if...else

```
if(condition)
```

```
{
```

```
    statements...
```

```
}
```

```
else
```

```
{
```

```
    statements...
```

```
}
```

If the condition is true, then compiler will execute the if block of statements, if false then else block of statements will be executed.

Nested if...else statement

We can use multiple if-else for one inside other this is called as Nested if-else.

Structure of Nested if...else

```
if(condition)
```

```
{
```

```
    statements...
```

```
}
```

```
else if
```

```
{
```

```
    statements...
```

```
}
```

```
else
```

```
{
```

```
    statements...
```

}