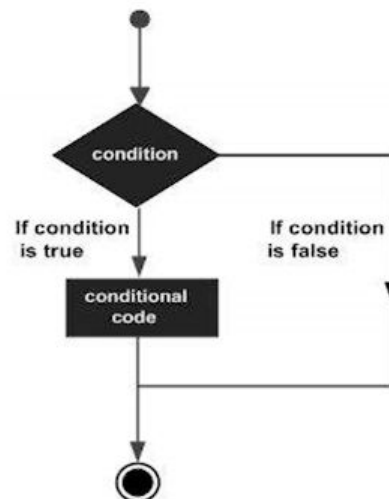


Control Flow overview:

- The statements inside your source files are generally executed from top to bottom, in the order that they appear.
- Control flow statements, however, break up the flow of execution by employing decision making, looping, and branching, enabling your program to conditionally execute particular blocks of code.
 - Decision-making statements (if-then, if-then-else, switch, goto)
 - Looping statements (for, while, do-while)
 - Branching statements (break, continue, return).

Decision making

- Structures require that the programmer specify one more conditions to be evaluated or tested the program.
 - If a condition is true then a statement or statements are executed.
 - if a condition is false then other statements are executed,

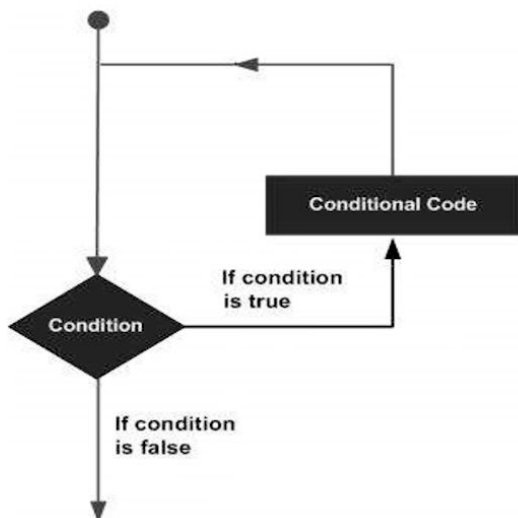


If statements

Statement	Description
if statement	An if statement consists of a boolean expression followed by one or more statements.
if...else statement	An if statement can be followed by an optional else statement, which executes when the boolean expression is false.
nested if statements	You can use one if or else if statement inside another if or else if statement(s)

Repeating code

- There may be a situation when you need to execute a block of code several number of times .
 - A loop statement allows us to execute a statement or group of statements multiple times.
 - Loop control statements change execution from its normal sequence.
 - ★ When execution leaves a scope, all automatic objects that were created in that scope are destroyed (break and continue).
 - A loop becomes infinite loop if a condition never becomes false
 - ★ The for loop is traditionally used for this purpose.



Loops

Loop Type	Description
while loop	It repeats a statement or a group of statements while a given condition is true. It tests the condition before executing the loop body.
for loop	It executes a sequence of statements multiple times and abbreviates the code that manages the loop variable.
do...while loop	It is similar to a while statement, except that it tests the condition at the end of the loop body
nested loops	You can use one or more loop inside any another while, for or do..while loop.