FORTRAN - LOOPS

There may be a situation, when you need to execute a block of code several number of times. In general, statements are executed sequentially : The first statement in a function is executed first, followed by the second, and so on.

Programming languages provide various control structures that allow for more complicated execution paths.

A loop statement allows us to execute a statement or group of statements multiple times and following is the general form of a loop statement in most of the programming languages:
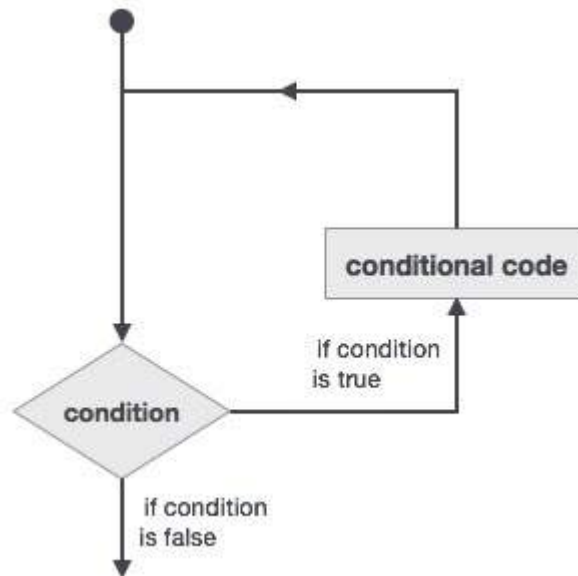
Fortran provides the following types of loop constructs to handle looping requirements. Click the following links to check their detail.

Loop Type	Description
do loop	This construct enables a statement, or a series of statements, to be carried out iteratively, while a given condition is true.
do while loop	Repeats a statement or group of statements while a given condition is true. It tests the condition before executing the loop body.
nested loops	You can use one or more loop construct inside any other loop construct.

Loop Control Statements

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.

Fortran supports the following control statements. Click the following links to check their detail.

Control Statement	Description
exit	If the exit statement is executed, the loop is exited, and the execution of the program continues at the first executable statement after the

end do statement.

cycle

If a cycle statement is executed, the program continues at the start of the next iteration.

stop

If you wish execution of your program to stop, you can insert a stop statement