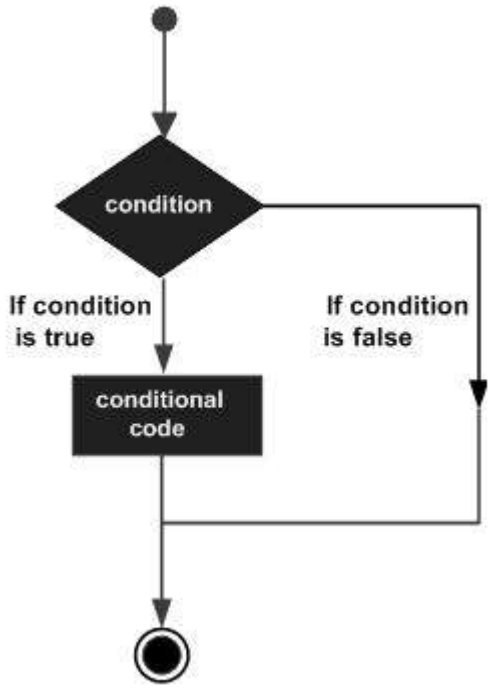
Swift - Decision Making

Decision making structures require that the programmer specifies one or more conditions to be evaluated or tested by the program, along with a statement or statements to be executed if the condition is determined to be **true**, and optionally, other statements to be executed if the condition is determined to be **false**.

Following is the general from of a typical decision making structure found in most of the programming languages −



Swift 4 provides the following types of decision making statements. Click the following links to check their detail.

Sr.No	Statement & Description
1	if statement An if statement consists of a Boolean expression followed by one or more statements.
2	if...else statement An if statement can be followed by an optional else statement, which executes when the Boolean expression is false.
3	if...else if...else Statement An if statement can be followed by an optional else if...else statement, which is very useful to test various conditions using single if...else if statement.
4	nested if statements You can use one if or else if statement inside another if or else if statement(s).
5	switch statement A switch statement allows a variable to be tested for equality against a list of values.

The ? : Operator

We have covered **conditional operator ? :** in the previous chapter which can be used to replace **if...else** statements. It has the following general form −

```
Exp1 ? Exp2 : Exp3;
```

Where Exp1, Exp2, and Exp3 are expressions. Notice the use and placement of the colon.

The value of a ? expression is determined like this: Exp1 is evaluated. If it is true, then Exp2 is evaluated and becomes the value of the entire ? expression. If Exp1 is false, then Exp3 is evaluated and its value becomes the value of the expression.