

Booleans

Swift has a basic *Boolean* type, called `Bool`. Boolean values are referred to as *logical*, because they can only ever be true or false. Swift provides two Boolean constant values, `true` and `false`:

```
1 let orangesAreOrange = true
2 let turnipsAreDelicious = false
```

The types of `orangesAreOrange` and `turnipsAreDelicious` have been inferred as `Bool` from the fact that they were initialized with Boolean literal values. As with `Int` and `Double` above, you don't need to declare constants or variables as `Bool` if you set them to `true` or `false` as soon as you create them. Type inference helps make Swift code more **간결한** **concise** and readable when it initializes constants or variables with other values whose type is already known.)

Boolean values are particularly useful when you work with conditional statements such as the `if` statement:

```
1 if turnipsAreDelicious {
2     print("Mmm, tasty turnips!")
3 } else {
4     print("Eww, turnips are horrible.")
5 }
6 // Prints "Eww, turnips are horrible."
```

Conditional statements such as the `if` statement are covered in more detail in [Control Flow](#).

Swift's type safety prevents non-Boolean values from being substituted^{바꾸다, 역할을 대신하다} for Bool. The following example reports a compile-time error:

```
1 let i = 1
2 if i {
3     // this example will not compile, and will report an error
4 }
```

However, the alternative example below is valid:

```
1 let i = 1
2 if i == 1 {
3     // this example will compile successfully
4 }
```

The result of the `i == 1` comparison is of type Bool, and so this second example passes the type-check. Comparisons like `i == 1` are discussed in [Basic Operators](#).

As with other examples of type safety in Swift, this approach avoids accidental errors and ensures that the ^{의도}intention of a particular section of code is always clear.