

Learn Go: Introduction

Go Comments

Comments are useful for documentation in a Go file and are ignored by the compiler. There are two types of comments:

- a single-lined comment is preceded by a double forward slash, //, and ends at the end of the line.
- a multi-lined comment begins with /* followed by one or more lines of comments and ends with */

```
// one line comment
/*
  this comment
  is on multiple lines
  and ends here
*/
```

Go Documentation

In Go, comments can be used as built-in documentation. To check the role of a function, in the command line, use the command go doc followed by a package or the function of a package. For example:

\$ go doc fmt

To find more information about a package's function:

\$ go doc fmt.println



Import Multiple Packages

To import multiple packages in a Go file, use the import keyword followed by the package name enclosed in double-quotes and repeat this statement for every imported package on its own line, or write a single import keyword to import multiple packages, one per line, in enclosed parentheses, (...).

```
import "fmt"
import "math"
import "time"
```

or

```
import (
  "fmt"
  "math"
  "time"
)
```

Go Compiler

As a compiled language, Go does not run until its source file is processed through a separate software called a compiler to produce a final executable program. The Go compiler can be accessed on the command line via a generic command such as:

```
go <command> [arguments]
```



Packages in Go

A Go package is a directory made up of a collection of Go source files that are compiled together. This collection of reusable code typically contains functions related to a specific topic or concept. To use code from a particular package, we simply import it into our Go source file.

For example, to import the fmt package which contains functions for formatting input and output strings, we type the keyword import followed by the package name.

import "fmt"

Running Files in Go

The Go compiler can execute Go code from the source file without producing an executable file. Instead of build , use run . To do this, type the following in the command line:

\$ go run exampleFile.go

Compile Go

The Go compiler takes a Go source file with a .go extension, processes it and produces an executable file without any extension. To compile a Go source file, test.go , type at the command line:

\$ go build test.go

This will produce an executable file, test . To run test , type in the command line:

\$./test



Go Import Package

To import a single package in a Go file, use the keyword import followed by the package name in double-quotes.

import "time"

