

# Setting up the Go environment

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# Installing the Go tools

Get the archive for your system from [golang.org/doc/install](https://golang.org/doc/install) (https://golang.org/doc/install).

Extract it somewhere, e.g. /usr/local:

```
$ tar -C /usr/local -xzf go$VERSION.$OS-$ARCH.tar.gz
```

Export the path and set the GOROOT environment variable:

(You may want to add commands like the following to \$HOME/.profile)

```
$ export GOROOT=/usr/local/go  
$ export PATH=$PATH:$GOROOT/bin
```

## Test your installation

```
$ go version  
$ go env GOROOT
```

# Creating a Workspace

A workspace is a directory hierarchy with three directories at its root:

```
gocode/  
├─ src/ # contains Go source files,  
├─ pkg/ # contains package objects, and  
└─ bin/ # contains executable commands.
```

The `go tool` builds source packages and installs the resulting binaries to the `pkg` and `bin` directories.

Set the `GOPATH` environment variable to specify the location of your workspace, e.g.:

```
$ export GOPATH=$HOME/gocode
```

# Creating and Running Go Programs

Create a new package directory inside your workspace, e.g.

```
$ mkdir -p $GOPATH/src/go-tutorial17/hello/
```

Create a file named `hello.go` inside that directory, containing the following Go code

```
package main

import "fmt"

func main() {
    fmt.Printf("What is a Gopher?\n")
}
```

Run the program

```
$ go run hello.go
```

# References

## Installing Go

[golang.org/doc/install](https://golang.org/doc/install) (https://golang.org/doc/install)

## Setting up a workspace

[golang.org/doc/code.html#Workspaces](https://golang.org/doc/code.html#Workspaces) (https://golang.org/doc/code.html#Workspaces)

Thank you

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