

Creating and Running Tests



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Overview



Naming conventions

Writing tests

Running tests

Viewing test coverage

Table-driven tests

Other useful functions



Naming Conventions

main_test.go

```
package main
```

```
func TestFoo(t *testing.T) {
```

```
    ...
```

```
}
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Same package for whitebox tests

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Add _test suffix to package for blackbox tests

Writing Tests



Receive `*testing.T` object



Write tests using normal Go code – no special assertion API



Report errors using methods on `*testing.T` object



Reporting Test Failures

Immediate failure

`t.FailNow()`

`t.Fatal(args ...interface{})`

`t.Fatalf(format string, args ...interface{})`

Non-immediate failure

`t.Fail()`

`t.Error(args ...interface{})`

`t.Errorf(format string, args ...interface{})`



`go test`

`go test {pkg1} {pkg2} ... {pkgn}`

`go test ./...`

`go test -v`

`go test -run {regexp}`

◀ Run all tests in current directory

◀ Test specified packages

◀ Run tests in current package and descendants

◀ Generate verbose output

◀ Run only tests matching {regexp}



Other Useful Functions

Log and Logf

Helper

Skip, Skipf, and
SkipNow

Run

Parallel

golang.org/pkg/testing



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