# Todd McLeod - Learn To Code Golang Hands-On Exercises #01

composite literal; slice literal

https://play.golang.org/p/nGekFavi0S

for range loop & index position https://plav.golang.org/p/1fzbabuaWD

composite literal; map literal

https://play.golang.org/p/kHmQmHwK c

print map value without using second return in for range https://play.golang.org/p/HvzecFdZPG

### answer

https://play.golang.org/p/WE8V3YoXu8 https://play.golang.org/p/ qPtpHASLS

using "make" to make a map <a href="https://play.golang.org/p/3FDj-UtWru">https://play.golang.org/p/3FDj-UtWru</a>

composite literal; struct literal

https://play.golang.org/p/cgc0Na2zhS

# func https://play.golang.org/p/vsblP3PmTc func (receiver) identifier(parameters) (returns) { <code> } methods - receivers make methods https://play.golang.org/p/XezUp4hdE6 trip out https://play.golang.org/p/3nd8m4oHNR interfaces https://play.golang.org/p/4kN4P9C2AW // HANDS ON 1 // create a type square // create a type circle // attach a method to each that calculates area and returns it // create a type shape which defines an interface as anything which has the area method // create a func info which takes type shape and then prints the area // create a value of type square // create a value of type circle // use func info to print the area of square // use func info to print the area of circle https://play.golang.org/p/1enChb7Kg5 // HANDS ON 2 // create a struct that holds person fields // create a struct that holds secret agent fields and embeds person type // attach a method to person: pSpeak // attach a method to secret agent: saSpeak

```
// create a variable of type person
// create a variable of type secret agent
// print a field from person
// run pSpeak attached to the variable of type person
// print a field from secret agent
// run saSpeak attached to the variable of type secret agent
// run pSpeak attached to the variable of type secret agent
SOLUTION: https://play.golang.org/p/RxrkCJw9Cd
```

## // HANDS ON 3

create an interface type that both person and secretAgent implement declare a func with a parameter of the interface's type call that func in main and pass in a value of type person call that func in main and pass in a value of type secretAgent <a href="https://plav.golang.org/p/-Ux0gHf4SF">https://plav.golang.org/p/-Ux0gHf4SF</a>

solution & optional additional info not necessary to know: assertions <a href="https://play.golang.org/p/0TX4o-u-B">https://play.golang.org/p/0TX4o-u-B</a>

# package main

```
import (
"io"
"net/http"
```

```
func foo(res http.ResponseWriter, req *http.Request) {
   io. WriteString(res, "foo ran")
func bar(res http.ResponseWriter, req *http.Request) {
   io. WriteString(res, "bar ran")
func main() {
   http.HandleFunc("/", foo)
   http.HandleFunc("/dog/", bar)
   http.ListenAndServe(":8080", nil)
```

string / slice of byte []byte https://play.golang.org/p/nl3morlwoO