

Solution Review: Map the Days

This lesson discusses the solution to the challenge given in the previous lesson.

```
package main
import (
    "fmt"
)

var Days = map[int]string{
    1: "Monday",
    2: "Tuesday",
    3: "Wednesday",
    4: "Thursday",
    5: "Friday",
    6: "Saturday",
    7: "Sunday"}

func findDay(n int) string {
    val, isPresent := (Days[n])
    if isPresent{           // what if key is not present
        return val
    }else{
        return "Wrong Key"    // return wrong key if invalid key
    }
}

func main() {
    n := 4
    fmt.Println(n, ":", findDay(n))
    n = 0
    fmt.Println(n, ":", findDay(n))
}
```



Map the Days

In the above code, outside `main` at **line 6**, we make a map `Days`. The declaration of `Days` shows that its keys will be of `int` type and values associated with its keys will be of `string` type. Initialization is as follows:

- Key `1` is given **Monday** as a value.
- Key `2` is given **Tuesday** as a value.
- Key `3` is given **Wednesday** as a value.

- Key `4` is given **Thursday** as a value.
- Key `5` is given **Friday** as a value.
- Key `6` is given **Saturday** as a value.
- Key `7` is given **Sunday** as a value.

Now look at the header of the function `findDay` at **line 15**: `func findDay(n int) string`. This function is taking `n` integer as a parameter and returning a *string* type value. We find the value against key `n` and store it in the variable `val`. We declare another *bool* variable `isPresent` to verify the existence of the key `n` in `Days`. If `isPresent` is **true**, it means the key `n` does exist in the map `Days`. If `isPresent` is **false**, it means the key `n` doesn't exist in the map `Days`. If `isPresent` is **true**, condition at **line 17** will be evaluated and the value of key `n` that is `val` will be returned from the function. But if `isPresent` is **false**, condition at **line 19** will be evaluated and the string **Wrong Key** will be returned from the function.

Let's see `main` now. At **line 24** we declare a variable `n` and initialize it with `4`. In the next line, we call `findDay` with `n` as a parameter. We are printing the result to verify the output. **Thursay** will be returned and printed on the screen when `n` is `4`. At **line 26**, we change the value of `n` to `0`. In the next line, we call `findDay` with `n` as a parameter. **Wrong Key** will be returned and printed on the screen when `n` is `0` because `0` is an invalid key.

That's it for the solution. In the next lesson, you'll study how maps and slices work together.