

Maps

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About

- | Maps are a commonly used data structure that stores data in key-value pairs
- | Extremely high performance when the key is known
- | Unordered - data is stored in random order

Making a Map

```
myMap := make(map[string]int)
```

```
myMap := map[string]int{  
    "item 1": 1,  
    "item 2": 2,  
    "item 3": 3,  
}
```

Map Operations

```
myMap := make(map[string]int)
```

Insert | `myMap["favorite number"] = 5`

Read | `fav := myMap["favorite number"]`
`missing := myMap["age"] // default value`

Delete | `delete(myMap, "favorite number")`

Check Existence | `price, found := myMap["price"]`
`if !found {`
 `fmt.Println("price not found")`
 `return`
`}`

Iteration

```
myMap := make(map[string]int)
```

```
for key, value := range myMap {  
    // ..  
}
```

Recap

- | Maps store data in key-value pairs
- | Very fast key accesses
- | Use **range** to iterate through a map
- | Use the **make()** function to create an empty map
- | Use the **delete()** function to remove an entry from the map
- | Read & write with map uses similar syntax to array