**Go range**

Range keyword is used to iterate over items of an array, slice, channel or map.

With array and slice it will return the index of the item as integer.

With maps it will return the key of the next key-pair.

Range either return the once value or two.

|  |  |  |
| --- | --- | --- |
| **Range expression** | **1st Value** | **2nd Value(Optional)** |
| Array or slice a [n]E | index i int | a[i] E |
| String s string type | index i int | rune int |
| map m map[K]V | key k K | value m[k] V |
| channel c chan E | element e E | none |

package main

import "fmt"

func main() {

    // creating a slice

    numbers := []int{1, 2, 3, 4, 5, 6, 7, 8, 9, 10}

    for i := range numbers {

        fmt.Println(numbers[i])

    }

    mystateCitymap := map[string]string{"gujarat": "ahmedabad", "kernataka": "banglore", "maharastra": "mumbai"}

    //Print map using keys

    for state := range mystateCitymap {

        fmt.Println("capital city of", state, "is", mystateCitymap[state])

    }

    //Print map using the key value

    for state, city := range mystateCitymap {

        fmt.Println("capital city of", state, "is", city)

    }

}

1

2

3

4

5

6

7

8

9

10

capital city of gujarat is ahmedabad

capital city of kernataka is banglore

capital city of maharastra is mumbai

capital city of gujarat is ahmedabad

capital city of kernataka is banglore

capital city of maharastra is mumbai