

golang 的二分查找

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原文链接: <https://ld246.com/article/1525348580697>

来源网站: [链滴](#)

许可协议: [署名-相同方式共享 4.0 国际 \(CC BY-SA 4.0\)](#)

```

import "fmt"

func main() {
    values := []int{10, 21, 26, 54, 76, 87, 98, 99, 100, 101, 111, 211, 322, 1000}
    fmt.Println(values[binary_search_recursive(values, 0, len(values), 1000)])
}

//while 方法
func binary_search(values []int, start int, end int, key int) int {
    ret := -1

    var mid int

    for start <= end {
        mid = start + (end-start)/2
        if values[mid] < key {
            start = mid + 1
        } else if values[mid] > key {
            end = mid - 1
        } else {
            ret = mid
            break
        }
    }
    return ret
}

//递归方法
func binary_search_recursive(values []int, start int, end int, key int) int {

    if start > end {
        return -1
    }

    mid := start + (end-start)/2

    if values[mid] > key {
        return binary_search_recursive(values, start, mid-1, key)
    } else if values[mid] < key {
        return binary_search_recursive(values, mid+1, end, key)
    }
    return mid
}

```