

Slices

A slice is convenient, flexible and powerful wrapper on top of array. Slices do not own any data on their own. They are just references to existing array.

creating a slice.

```
func main() {
    a := []int { 76, 77, 78, 79, 80 }
    var b []int = a[1:4]
    // create a slice from a[1] to a[3]
    fmt.Println(b)
    // → [77 78 79]
```

The syntax `a[start:end]` create a slice from array a starting from index start to index end-1.
 ↙ no-1

In the above program `a[1:4]` creates a slice representation of the array a starting from index 1 through 3.

Another way to create slice

```
func main() {
    c := []int { 3, 4, 5 } // create an array and
    fmt.Println(c)        // returns a slice reference.
}
```

Modifying a Slice.

A slice does not own any data of its own. It is just a representation of the underlying array. Any modifications done to the slice will be reflected in the underlying array.

```
func main() {  
    darr := [...]int {57, 89, 90, 82, 100, 78, 67, 69, 59}  
    dslice := darr[2:5] // 2, 3, 4  
    fmt.Println("array before", darr)  
    for i := range dslice {  
        dslice[i]++  
    }
```

```
    fmt.Println("array after", darr)
```

→ array before [57 89 90 82 100 78 67 69 59]
array after [57 89 91 83 101 78 67 69 59]

When a number of slices shares the same underlying array, the changes that each one makes will be reflected in the array.

```
func main() {  
    numa := [...]int {78, 79, 80}  
    num1 := numa[:] // slice contains all the elements  
    num2 := numa[:]  
    fmt.Println("array before change", numa)  
    num1[0] = 100  
    fmt.Println("array after modification to slice num1",
```