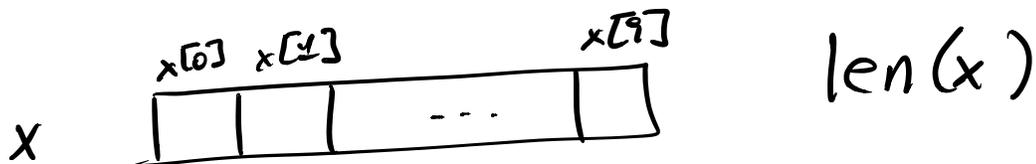


ARRAY

var x, z [10] int ↙ tipo
 ↘ osservato
var y [9] int



[x = z ← COPIA
if x == z ≙ CONFRONTO (ELEM. PER ELEM.)

func f(x [10] int) ...

f(z)

LETTERALI ARRAY

x := [8] int {0, 1, -1, 4, 2, 2, 3, 3}
x := [8] int {0, 1, 2} // resto = 0
x := [...] int {0, 1, 2, 3} // array
// resto 4
x := [8] int {1:3, 6:-1}
 ↑ ↑
 include include

```
for i := 0; i < len(x); i++ {  
    ...  
}
```

I^o

```
for i := range x {  
    ...  
}
```

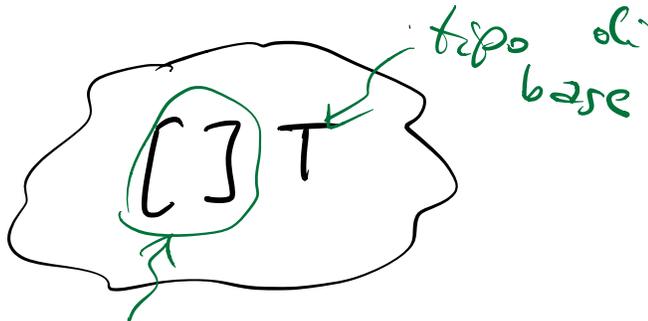
II^o

```
for i, v := range x {  
    ...  
}
```

x[i]
v

III^o
(in letters)

SLICE



dichiarazione

no dimension

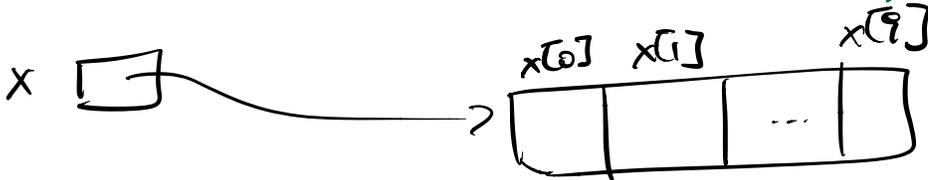
`var x []int`

`x = make ([]int, 10)`

creazione

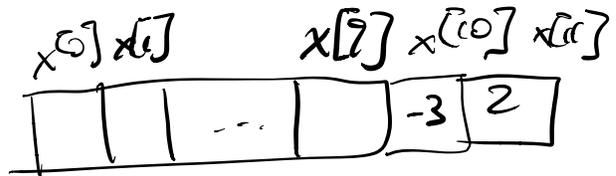
tipo della slice

lunghezza
(può essere una qualunque espressione intera)



`x = append(x, -3, 2)`

prolungamento della slice



LETTERALI SLICE

$x := [] \text{int } \{1, 3, 4\}$

$x := [] \text{int } \{\}$

LE SLICE: DIETRO LE QUINTE

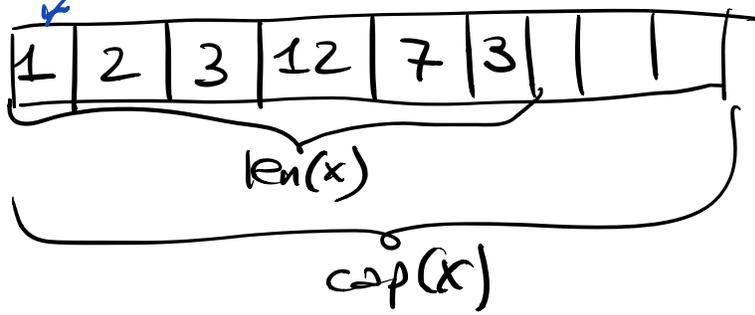
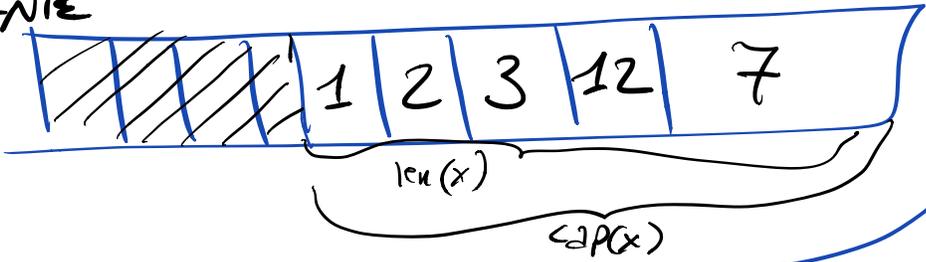
```
var x []int
x = []int {1, 2, 3}
```

```
struct {
    len, cap int
    data uintptr
}
```

```
x = append(x, 12)
x = append(x, 7)
x = append(x, 3)
```

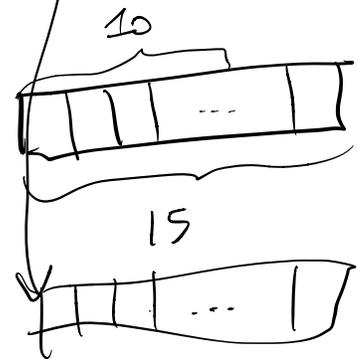
len	5
cap	9
	•

ARRAY SOGGIA CENTE



var x [int]
x = make (T)int, 10, 15)
x = make (T)int, 10, 15)

len	10
cap	15
data	



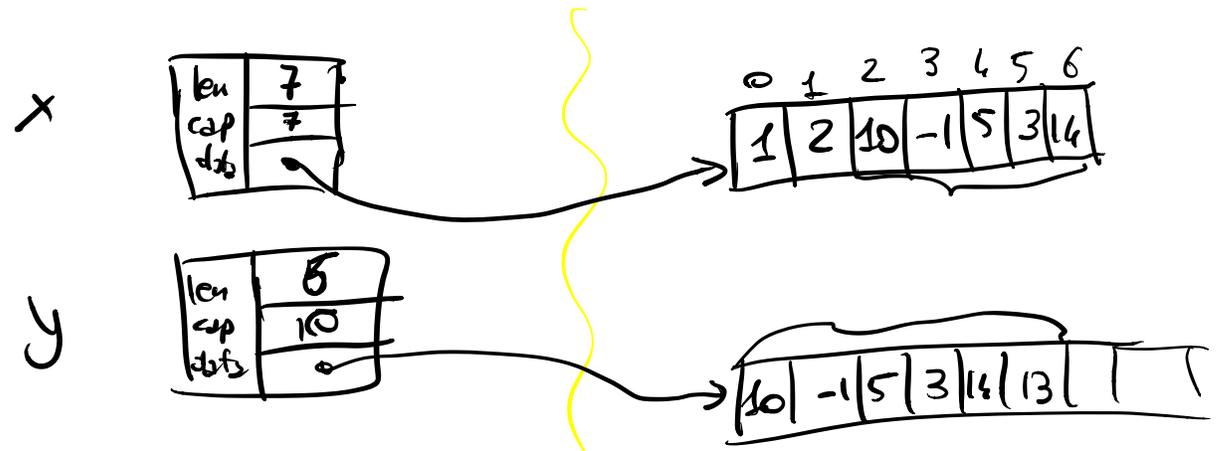
SUBSLICING

```

var x, y [int]
→ x = [int] {1, 2, 3, 4, 5, 6, 7}
→ y = x[2:5] ←

```

↑ indice iniziale (caprese)
↑ indice finale (escluso)



ALIASING!

```

x[3] = -1
y[0] = 10
y = append(y, 3)
y = append(y, 14)

```

$y = \text{append}(y, 13)$

$\text{var } x, y \text{ [] int}$
 $x = \text{[] int } \{1, 2, 3, 4, 5\}$
 $y = x \quad \left\{ \begin{array}{l} y = x[0] \end{array} \right.$

ESERCIZIO

- Scrivere un programma con una funzione che decide se un numero è primo.

Nel main, chiedere all'utente un valore n e inserire in una slice tutti i primi $\leq n$.

Stampare la slice, la sua lunghezza e la sua capacità.

(Prima di eseguirlo, tentate
di indovinare quale
sarà la capacità)