

ARRAY E SLICE

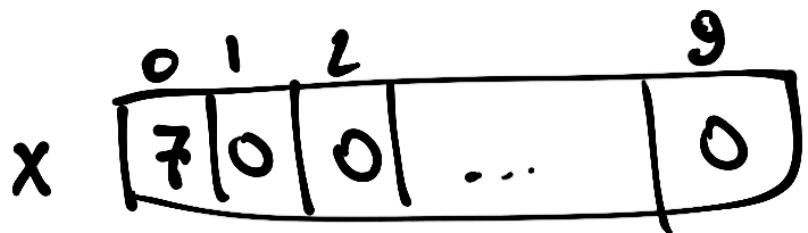
- TANTI VALORI TUTTI
DELO STESSO TIPO

- VETTORI

$$\underline{X} = (x_1, x_2, x_3, \dots, x_n)$$

[2] int ← TPI
[5] int ← DIVERGE

var x [10] int
x[0] x[1] ... x[9]
len(x)
x[0] = 7
func. Println (x[5])



var x [1000] int

I. $\left[\begin{array}{l} \text{for } i := 0; i < \text{len}(x); i++ \{ \\ \dots x[i] \dots \end{array} \right.$

II. $\left[\begin{array}{l} \text{for } i := \text{range } x \{ \\ \dots x[i] \dots \end{array} \right.$

III. $\left[\begin{array}{l} \text{for } i, d := \text{range } x \\ \dots d \dots i \dots \\ \quad \uparrow \\ \quad x[i] \end{array} \right. \left. \begin{array}{l} \text{Solo} \\ \text{w} \\ \text{LETURA} \end{array} \right.$

var x[1000] int

...

I. for i := 0; i < len(x); i++ {
 sum += x[i]
}

II. for i := range x {
 sum += x[i]
}

III. for _, v := range x {
 sum += v
}

LETTERAL ARRAY

$[10] \underline{\text{int}} \{7, 8, 10, 4, \dots\}$

$[\dots] \underline{\text{int}} \{7, 4, 9, 8\}$

$[40] \underline{\text{int}} \{0: 12, 3: 120\}$

var x, y $[10] \underline{\text{int}}$

→ x = $[10] \underline{\text{int}} \{5, 4, 3\}$

for y = x

i := len(y) - 1; i > 5; i-- {
y[i] = i * i

}

	0	1	2	3	4	5	6	7	8	9
x	5	4	3	0	0	0	0	0	0	0

	0	1	2	3	4	5	6	7	8	9
y	5	4	3	0	0	0	36	49	64	81

~~Var x [..]int~~

X := [..]int {3, 4, 5}

VARIANZA

x_1, x_2, \dots, x_n

$$\mu = \frac{x_1 + x_2 + \dots + x_n}{n} = \frac{\sum_{i=1}^n x_i}{n}$$

$$\sigma^2 = \frac{(x_1 - \mu)^2 + (x_2 - \mu)^2 + \dots + (x_n - \mu)^2}{n}$$


```

var (
  x [150] float64
  s, s2 float64
  n int

```

LETTURA

```

)
for n < len(x) {
  fut. Print("valore (-1 = stop): ")
  fut. Scan(&x[n])
  if x[n] == -1 {
    break
  }
  n++
}

```

SOMMA

```

for i := 0; i < n; i++ {
  s += x[i]
}

```

SOMMA
DIFF. 12
QUADR.

```

media := s / float64(n)
for i := 0; i < n; i++ {
  s2 += (x[i] - media) * (x[i] - media)
}

```

$$\text{varianza} := s^2 / \text{float}(n)$$

switch { selective }

case val, val, ...:

case val, val, ...:

↳

switch {

case expr, expr, ...:

case expr, expr, ...:

}

SLICE

- SUPERFICIALMENTE, SONO
ARRAY CON DIM. VARIABLE
(si possono estendere)

[] { TIPO }

var x [] int

var a [10] int

len(x)

x[0]

x[1]

...

x[len(x)-1]

CREAZIONE DI UNA SLICE

var x []int

1) x = []int {3, 7, 12, 4}

2) x = make ([]int, ^{lunghezza} 20)

ALLUNGAMENTO

x = append(x, 100)

aggiunge un nuovo elemento
di valore 100 in fondo
alla slice

$x = \text{append}(x, a_1, a_2, \dots, a_n)$
append a_1, \dots, a_n
in fondo alla slice
 x

$x = \text{append}(x, y \dots)$
append l'intera slice
 y in fondo alla
slice x

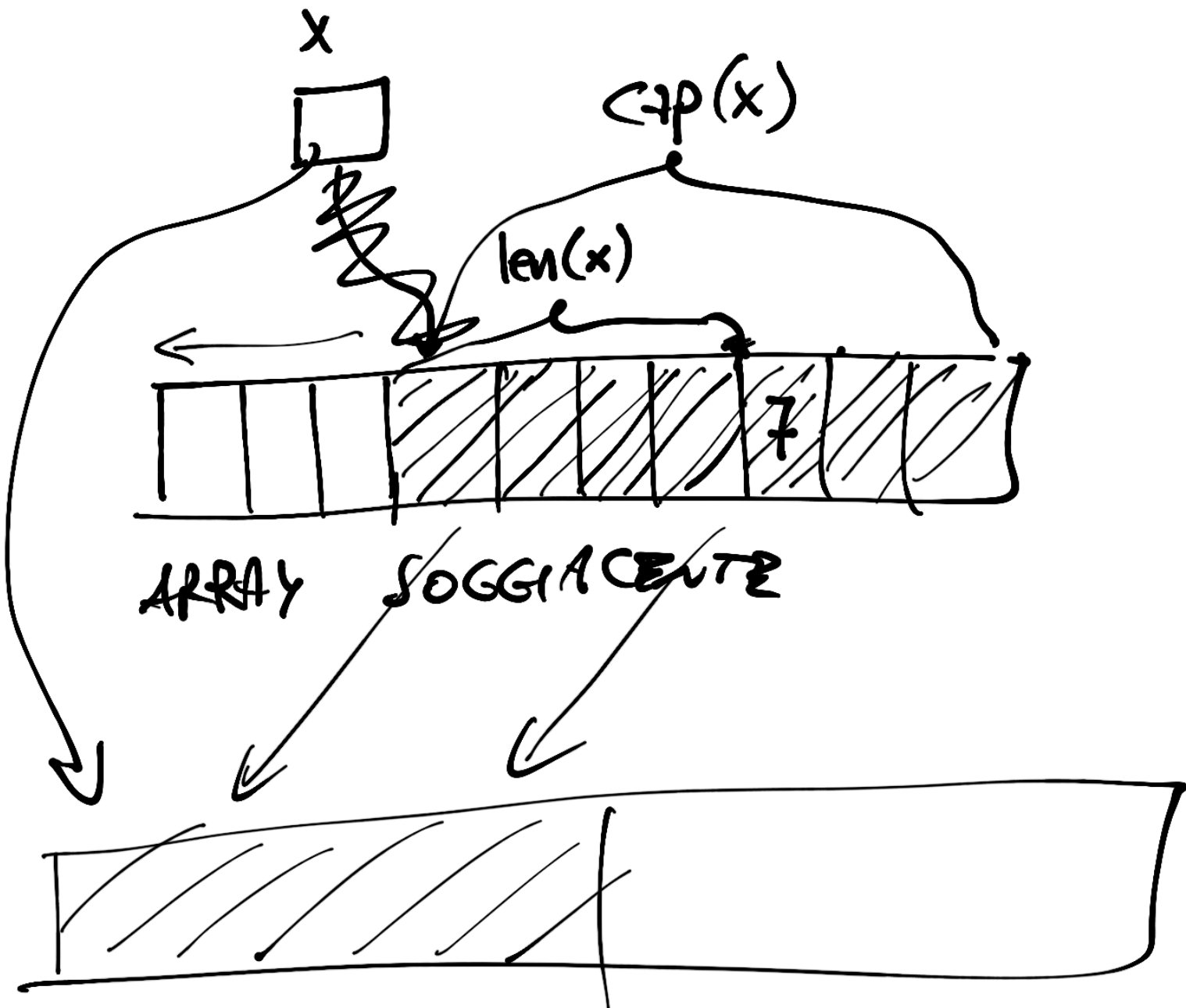
```
var (  
  x [] float64  
  s, sz float64  
  y float64  
)
```

```
for (  
  fut. Print("Value (-1=stop): ")  
  fut. Scan (&y)  
  if y == -1 {  
    break  
  }  
  x = append(x, y)  
)
```

```
for _, v := range x {  
  s += v
```

```
}  
media = s / float64(len(x))
```

for $v := \text{range } x$ {
 $s2 += (v - \text{med}(a)) * (v - \text{med}(b))$
}



```
x = make ([ ] int, 0, 100)
```

