ITERAZIONE (cont.)

FOR 0-ARIO

```
for {
    Blocco
}
```

=

```
for true {
    Blocco
}
```

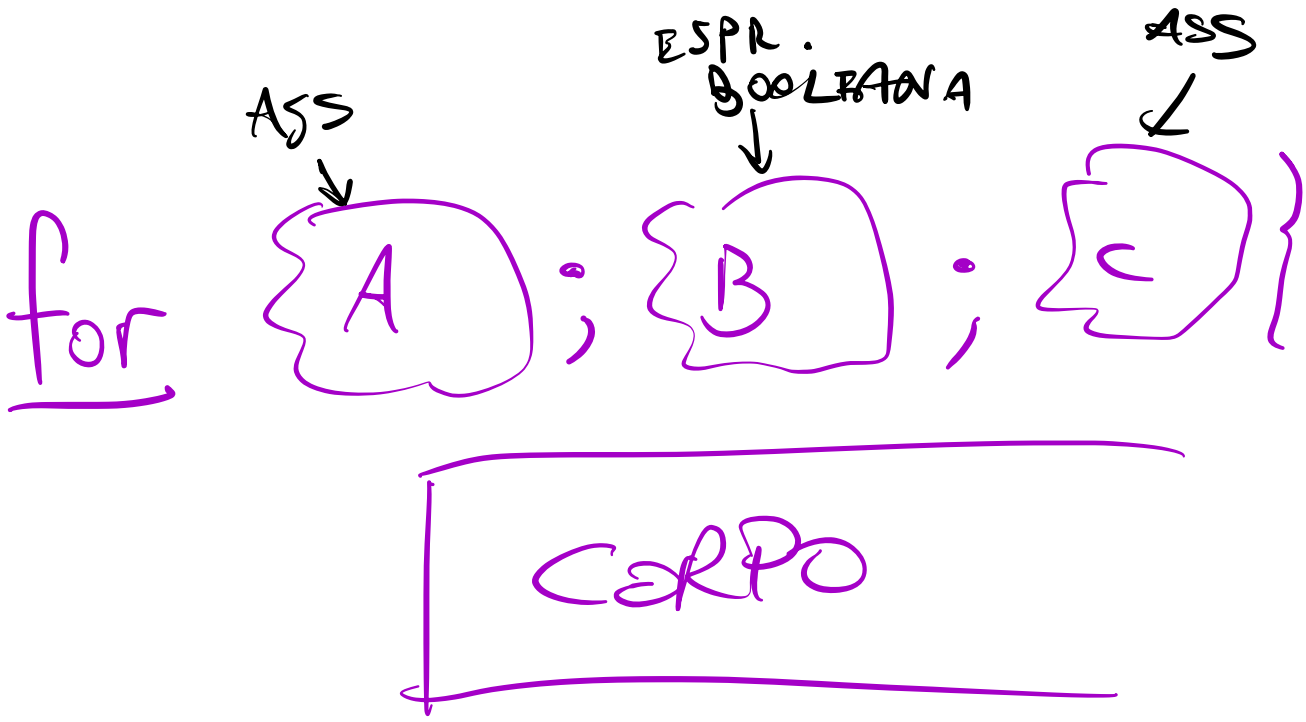
FOR 3-ARIO

```
var  n, c, s   int
fmt.Scan(&n)
c = 1
for  c <= n {
        s += c
        c++
}
fmt.Println(s)
gauss := n*(n+1)/2
if  s != gauss {
        fmt.Println("***PAUKO")
```

$\forall c \in \{1, \dots, n\}$

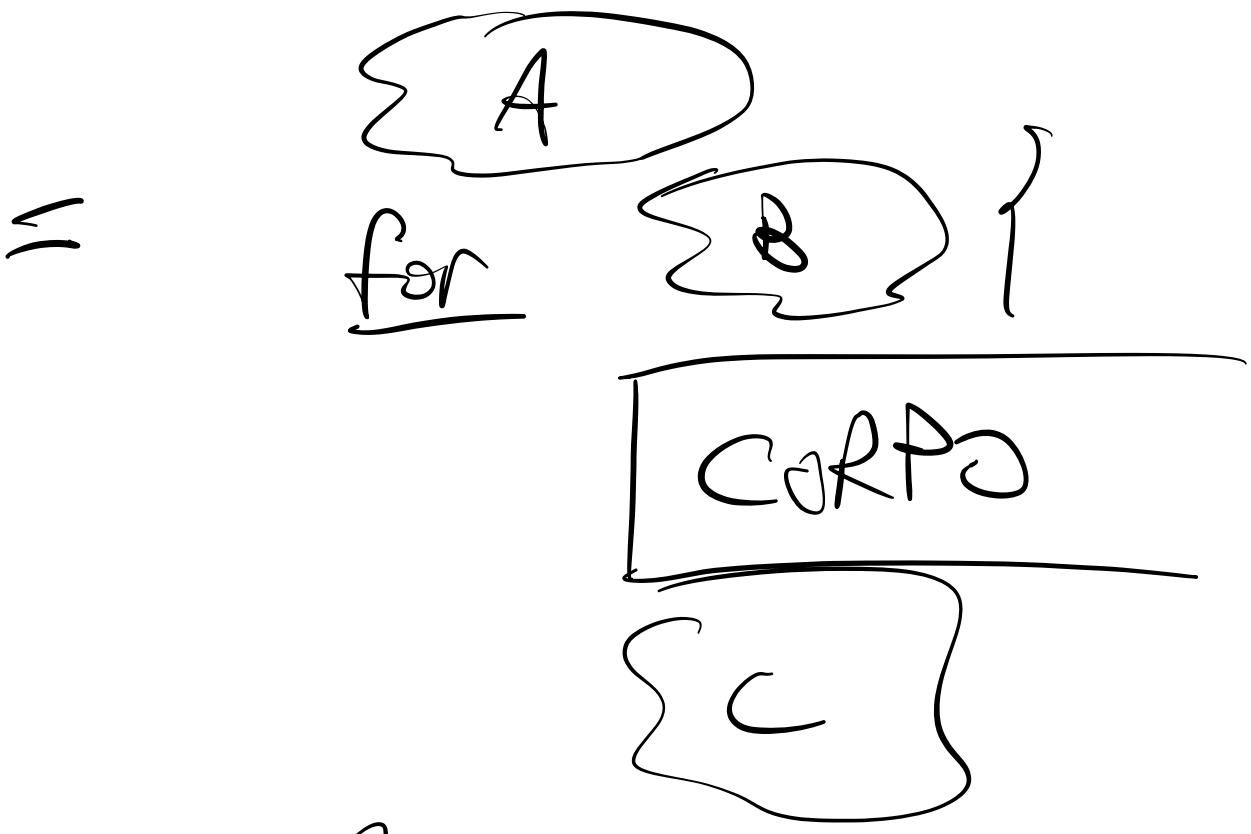
...

}


ASS
ESPR. BOOLEANA
ASS
for
A
;
B
;
C
CORPO

}

=


A
for
B
CORPO
C

}

```
c = 1
for c <= n {
    s += c

    c++
}
```

⇓

```
for c=1; c<=n; c++ {
    s+=c
}
```

```
for c:=1; c<=n; c++ {
    s+=c
}
```

FARE QUALCOSA n VOLTE

```
for i:=1; i<=n; i++ {
    fmt.Println("*")
}
```

```
for i:=0; i<n; i++ {
    fmt.Println("*")
}
```

```
for i=n; i>0 ; i-- {
        fmt.Println("*")
}
```

ESEMPIO

- Data n, stampa i primi n quadrati perfetti

```
Quanti? 7
0
1
4
```

9
16
25
36

```
var n int
fmt.Scan(&n)
for i:=0; i<n; i++ {
    fmt.Println(i*i)
}
```

3

- Data n, stampa le prime n potenze di 2

Quanti ? 7

1
2
4
8
16
32
64

```
var n int
fmt.Scan(&n)
for i:=0; i<n; i++ {
    p:=1
    for c:=0; c<i; c++ {
        p*=2
    }
    fmt.Println(p)
}
```

Stampa le prime n potenze di 2:

```
var n int
fmt.Scan(&n)
p:=1
for i:=0; i<n; i++ {
    fmt.Println(p)
    p *= 2
}
```

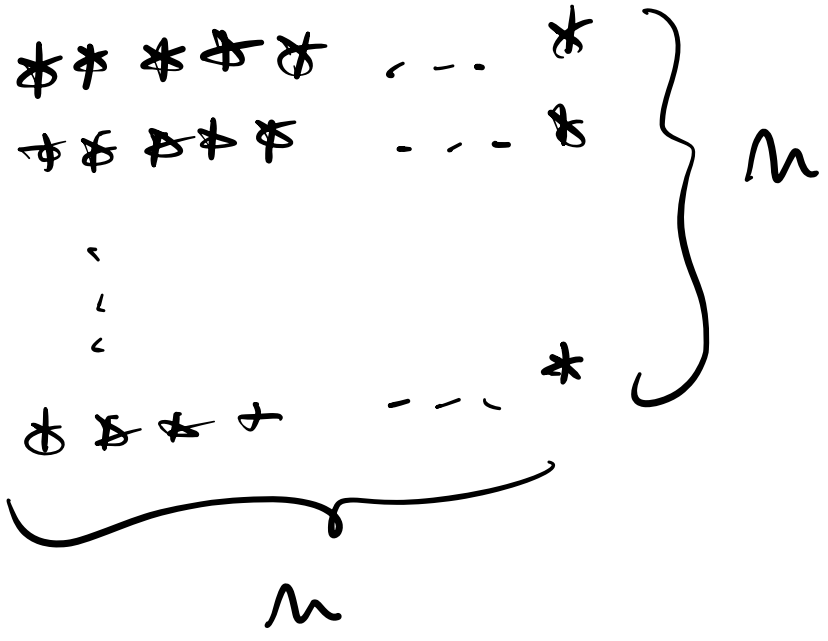
Stampa le potenze di 2 fino a n (compreso):

```
var n int
fmt.Scan(&n)
for p:=1; p<=n; p*=2 {
```

```
        fmt.Println(p)
}
```

STAMPA DI PATTERN

Dato n stampa

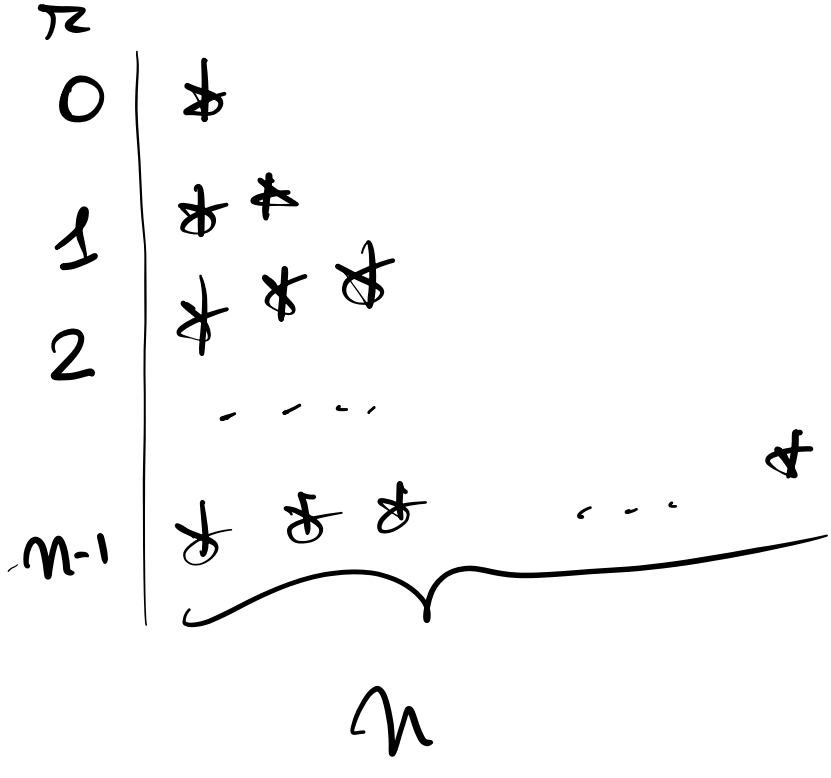



```
var n int
fmt.Scan(&n)
for r:=0; r<n; r++ {
    for c:=0; c<n; c++ {
        fmt.Print("*")
    }
```

fmt.Println()

}

Dato n stampare



Var n int

fmt.Scan(&n)

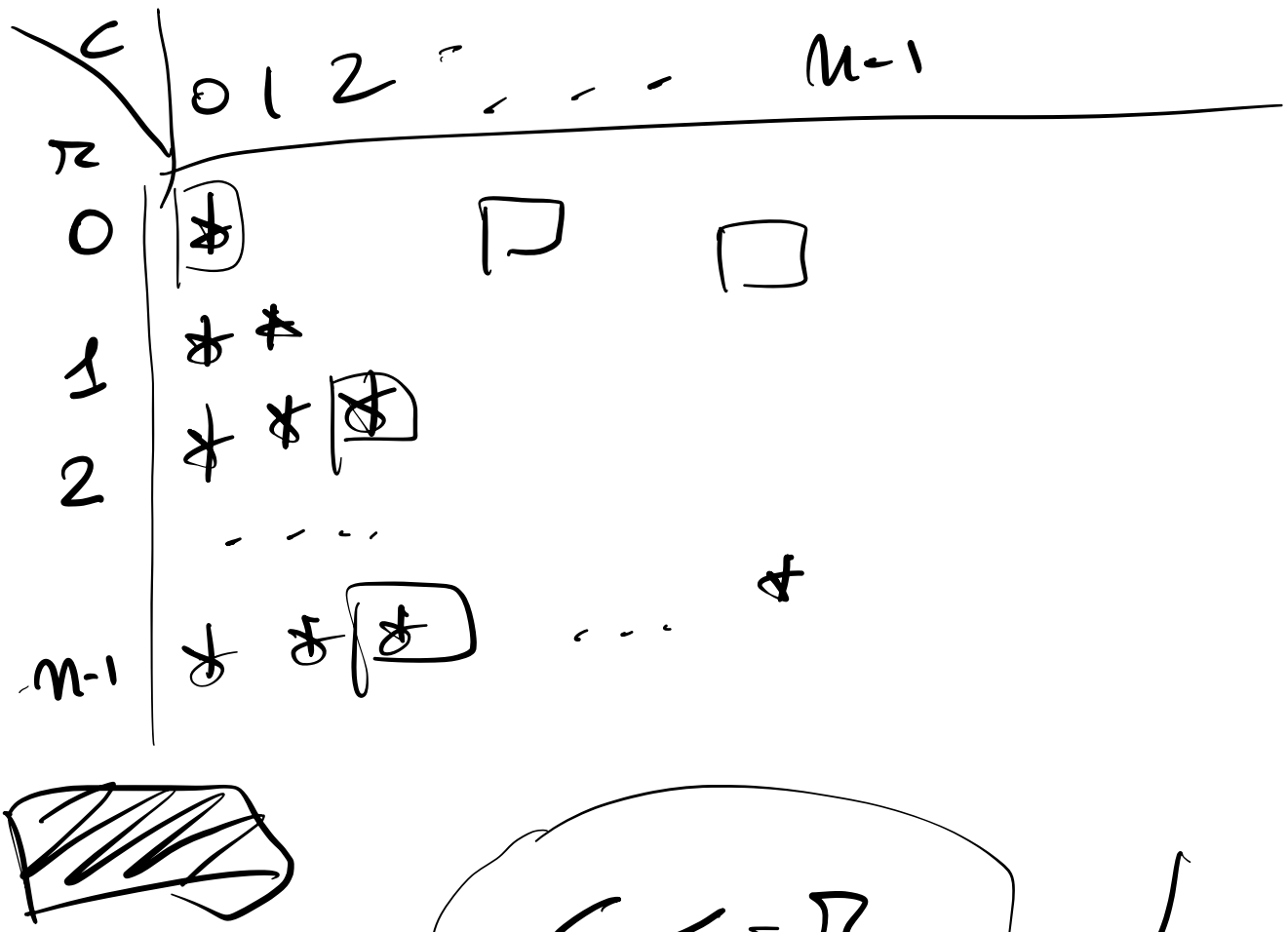
for r:=0; r<n; r++ {

for c:=0; c<r+1; c++ {

```
for c:=0; c ... ;
        fmt.Print("*")

    }

    fmt.Println

}
```

```
var n int
fmt.Scan(&n)
for r:=0; r<n; r++ {
    for c:=0; c<n; c++ {

    }
    fmt.Println()
```

}




```
if (c <= r) {
    fmt.Print("*")
} else {
    fmt.Print(" ")
}
```

LETTURA RIPETUTA DI CINPUT

LETTURA IN QUANTITÀ NOTA

```
Var n, h, s  int
fut. Print ("Quante persone?")
fut. Scan (&n)
for i:=0; i<n ; i++ {
        fut. Scan (&h)
        s+=h
}
```

media := float64(s)/float64(n)
fmt.Println(media)

LETTURA CON "TAPPO" =0

```
var n, h, s int
fmt.Scan(&h)
for h > 0 {
    n++
    s += h
    fmt.Scan(&h)
}
media := float64(s)/float64(n)
```

```
var n, h, s int
for {
    fmt.Scan(&h)
    if h == 0 {
        break
    }
    s += h
    n++
}
media := float64(s) / float64(n
```

STABILIRE SE UN NUMERO È PRIMO

```
var entrato bool
var n int
fut.Scan(&n)
for d := 2; d<n; d++ {
    if n%d==0 {
        entrato = true
        break
    }
}
if entrato {
    fut.Println("Cayo,te")
```

```
} else {
    fmt.Println("Pino")
}
```