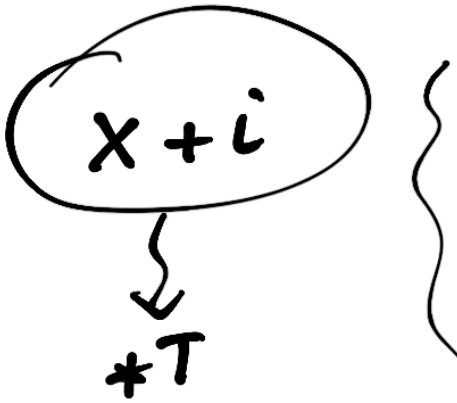
ARITMETICA DEI PUNTATORI

```
T  *x;
int i;
```

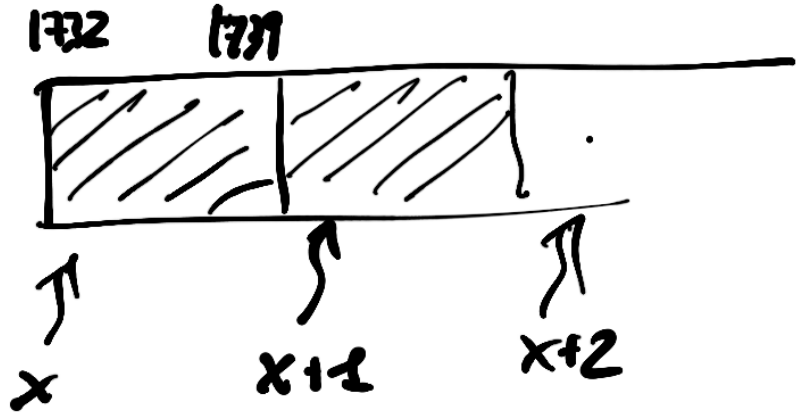
```
var x *T
```



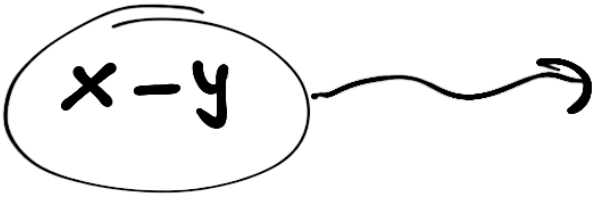
x = 1732

i = 12

x + i * sizeof(T)




```
T  *x, *y
```




```
x-y
sizeof(T)
```

```
int x[10];
```

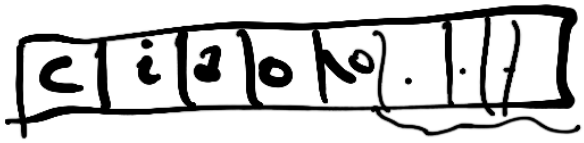
$*(x+1) = 3$ | $x[1] = 3$

STRINGHE IN C

= ARRAY DI CARATTERI CON UN CARATTERE SPECIALE (0) CHE INDICA LA FINE

```
char x[10];
x[0] = 'c';
x[1] = 'i';
x[2] = 'a';
x[3] = 'o';
x[4] = '\0';
```

'\0'




```
printf("%s", x);
```

ciao

```
char x[10];
x = "ciao";
```

```
strcpy(x, "ciao")
```

```
void strcpy(char *dest, char *src){
    while (*src)
        *(dest++) = *(src++);
    *dest = 0;
}
```

```
a = ((b=5) + 1);
```

↑

$(x+1)*3$

while $((a = x++) - 3)$

. . .

$x++$: valore di x prima dell'incr.

$++x$: valore di x dopo l'incr.

x	6
a	5

$a = x++$ | $x = x++$

$x = ++x$

```
int strlen (char *x) {
    char *y;
    for (y=x; *y; y++);
    return y-x;
}
```

3

```
if (!strcmp(x,y)) ...
if (x==y)
```

```
int strcmp (char *x, char *y) {
    while (*x && *y) {
        if (*x - *y)
            return *x - *y;
        x++; y++;
    }
    if (*x) return +1;
    if (*y) return -1;
    return 0;
}
```

PREPROCESSORE

```
#include <stdio.h>

#define MAX 1000

char x[MAX];

#define max(a,b) a>b?a:b
```

max(a,b) ⇝ a>b?a:b

```
x = (a>b? a: b) + c;
x = (a>b? a++ : ++b);
```

#define sqr(a) ((a)*(a))

$x = sqr(y) \rightsquigarrow x = (y)*(y)$

$x = sqr(y+1) \rightsquigarrow x = (y+1)*(y+1)$

$x = 1 + sq$

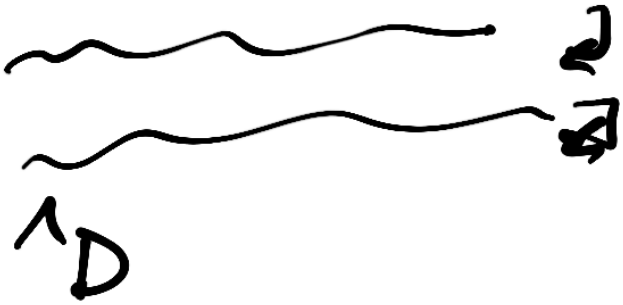
```
void main() {
    ...
}
```

```
int main()
    ...
    return 0;
}
```

```
int main(int argc, char **argv)
char *argv[]
```

```
go test -covprofile out
go tool cover -html out
```

```
scanner := bufio.NewScanner(os.Stdin)
for scanner.Scan() {
    ...
    line := scanner.Text()
    ...
}
```




```
f, _ := os.Open(...)
```

17 planes

2^{16}

$2^{20} < 2^{16} \cdot 17 \leq 2^{21}$

"stazza"

"staazza"

[]rune(st)

```
line := scanner.
```

```
(one((os.Args[1])[0]) == '2'
```