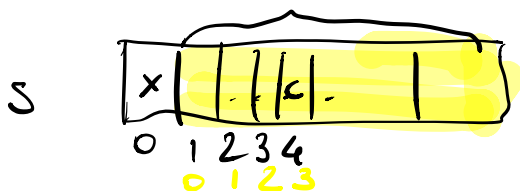


Scrivere una funzione ricorsiva
 che data una stringa ASCII s
 e un byte (=carattere) c ,
 trovi e restituisca la prima
 pos. di c in s

VERSIONE ITERATIVA

```

func pos (s string, c byte) int {
    for i:=0; i < len(s); i++ {
        if s[i] == c {
            return i
        }
    }
    return -1
}
    
```



VERSIONE RICORSIVA

```
func pos (s string, c byte) int {  
    if len(s) == 0 {  
        return -1  
    }  
    if s[0] == c {  
        return 0  
    }  
    if x := pos(s[1:], c) {  
        if x == -1 {  
            return -1  
        }  
        return x + 1  
    }  
}
```

CASE BASE

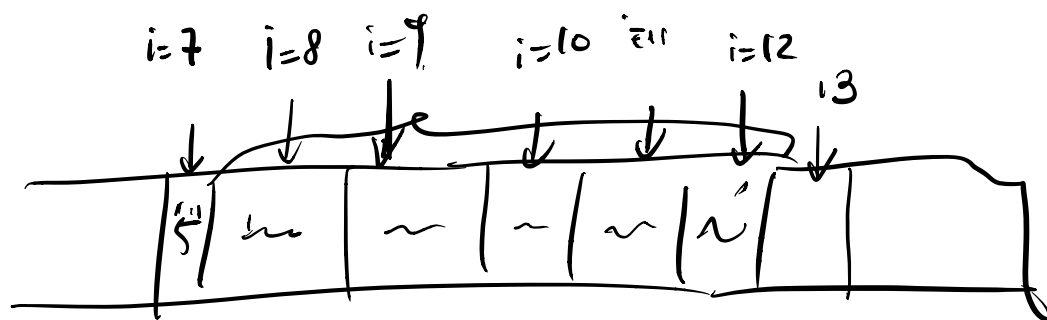
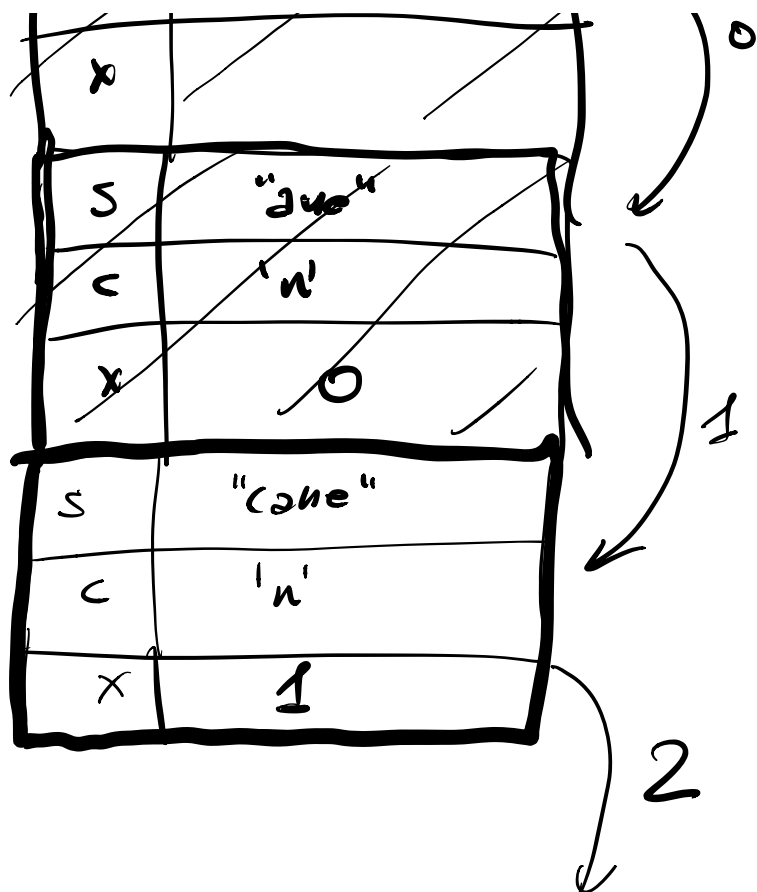
RICORS

pos("ne", 'n')

s	"ne"
c	'n'

→ pos("one", 'n')

pos("cane", 'n')



```

func cancells (s [] string) []string {
    var res []string
    for i := 0 ; i < len(s); i++ {
        n, ok := strconv.Atoi(s[i])
        if !ok {
            res = append(res, s[i])
        } else {
            i++ = n
        }
    }
    return res
}

```

a = append(a, b...)

$$\begin{array}{c} n \quad \quad \quad d \\ \downarrow \quad \quad 325 \\ \hline 3 \ 5 \ 7 \ 1 \ 2 \ 5 \end{array} \quad \rightarrow \quad 2$$

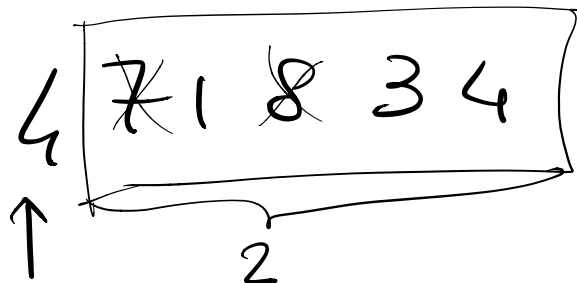
func $f(n \text{ string}, d \text{ int}) \text{ int} \{$
if $d == 0 \{$
 $\quad x, - := \text{strconv.Atoi}(n)$
 $\quad \underline{\text{return } x}$

$\}$
 $\quad m1 := f(n[1:], d-1)$
 $\quad \left[\begin{array}{l} y := f(n[1:], d) \text{ "3 u2"} \\ u2, - := \text{strconv.Atoi} \\ \quad (\text{string}(n[0]) + \\ \quad \text{strconv.Itoa}(y)) \end{array} \right]$
 $\rightarrow$
 $\quad \underline{\text{if}} \quad m1 < u2 \{$
 $\quad \quad \text{return } m1$
 $\quad \underline{\text{else}} \{$
 $\quad \quad \underline{\text{return } u2}$
 $\quad \}$

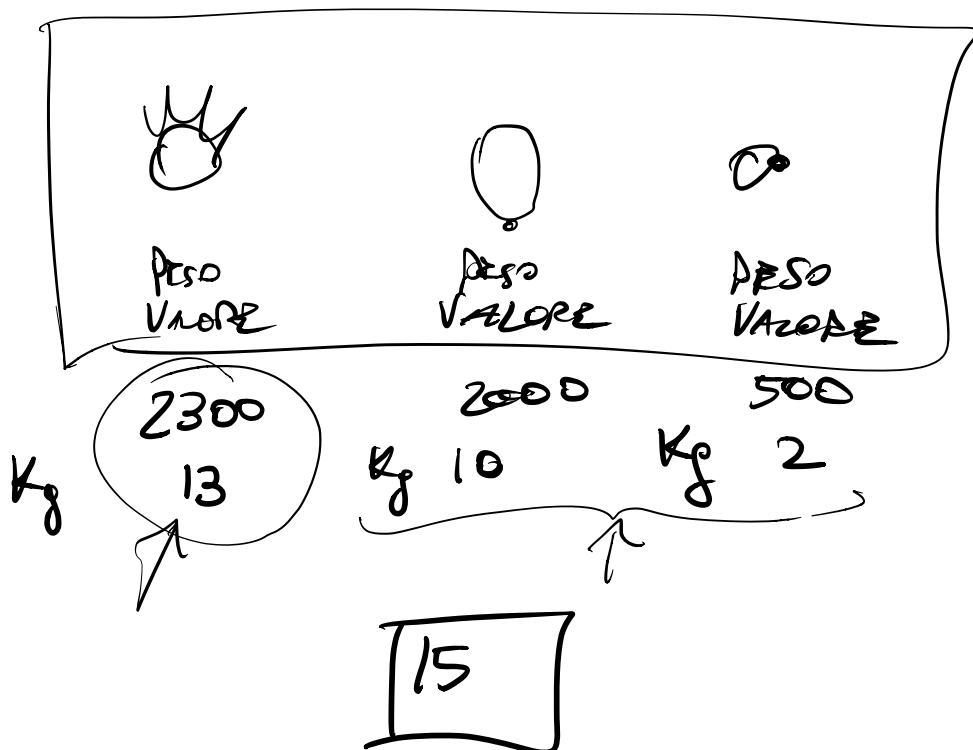
}

1

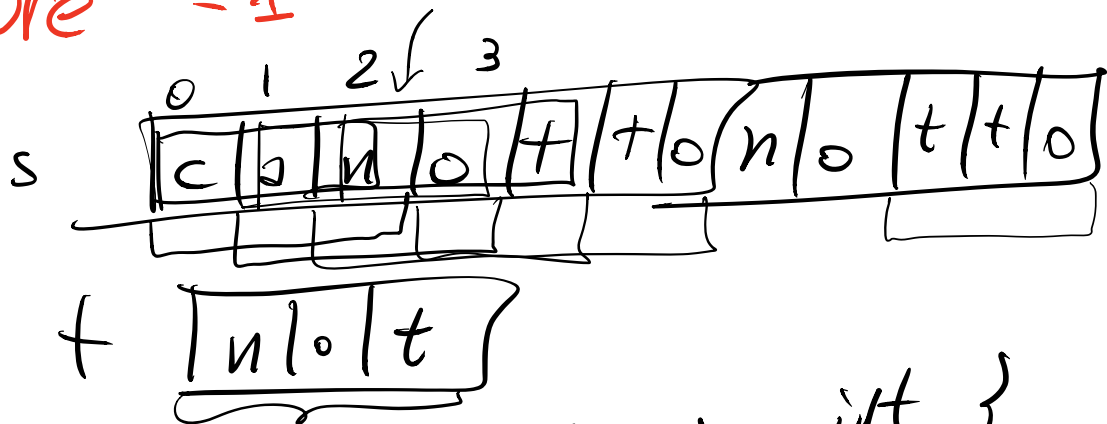
$d=2$



4 134



Scrivere una funzione che data
 una stringa s e un'altra stringa
 t , trova la posizione in
 s in cui t compare per la
 prima volta come sottosstringa
 oppure -1 [ASCII]



```

func search (s, t string) int {
    nt := len(t)
    for i := 0; i < len(s) - nt; i++ {
        if s[i:i+nt] == t {
            return i
        }
    }
    return -1
}
    
```

[Non ASCII]

```
func search(s, t string) int {  
    c := 0  
    nt := len(t)  
    ~~~~~  
    for i, _ := range s {  
        if i+nt < len(s) && s[i:i+nt] == t {  
            return c  
        }  
        c++  
    }  
    return -1  
}
```


s "Una cosa troppa piccola"

a [c|2|2|2|c|t|t|c|2]



"Un4 3454 2roppo ..."

func transform (s string, a [rune] string)

(X) var m map[rune] int
m = make (map[rune] int)
for -, r := range a {
 m[r]++

}

res := ""

for -, r := range s {
 if m[r] == 0 {
 res += string(r)

 } else {

 res += strconv.Itoa(m[r])

```

    }
    {
    }
    }
    return res
}

```

```

    c := 0
    for _, t := range a {
        if t == r {
            ++
        }
    }
    if c == 0 {
        res += string(r)
    } else {
        res += strconv...
    }
}

```