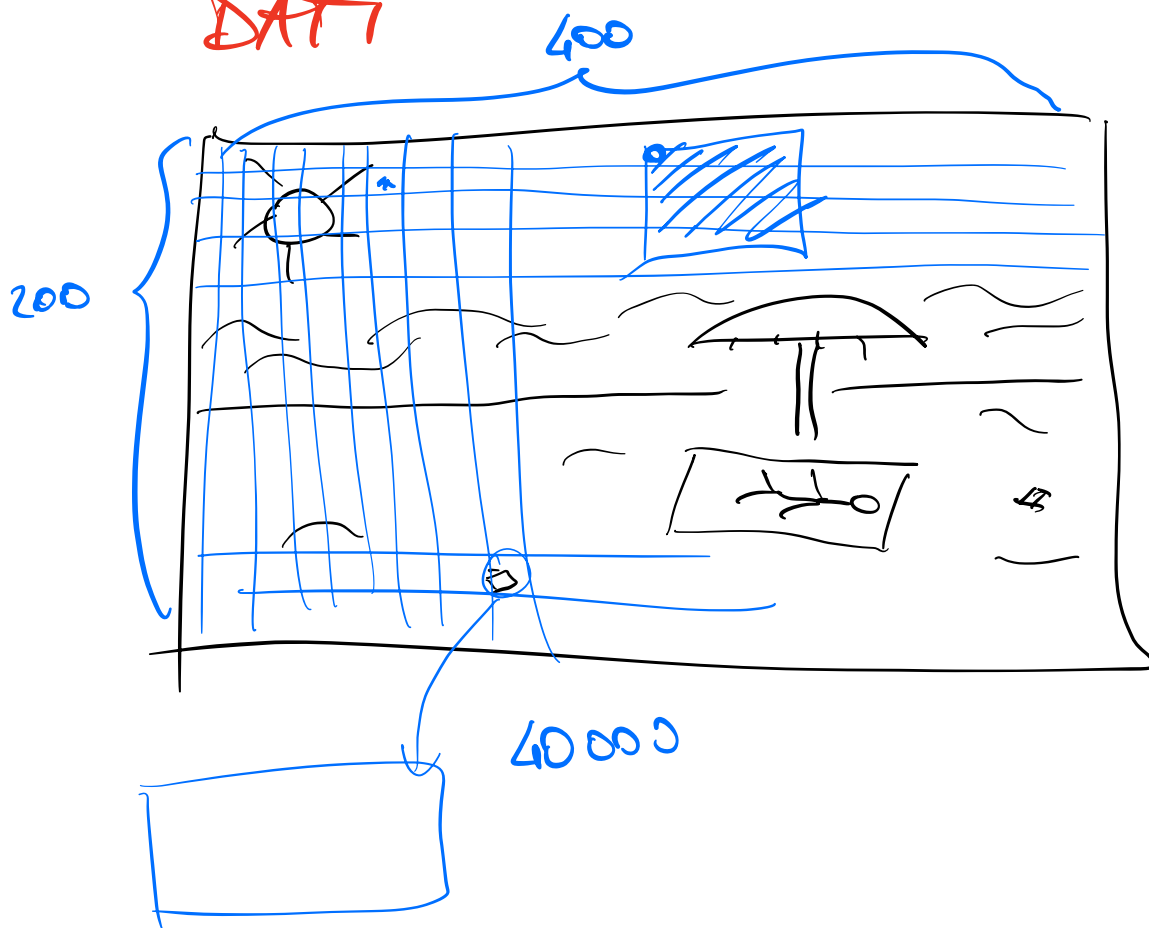


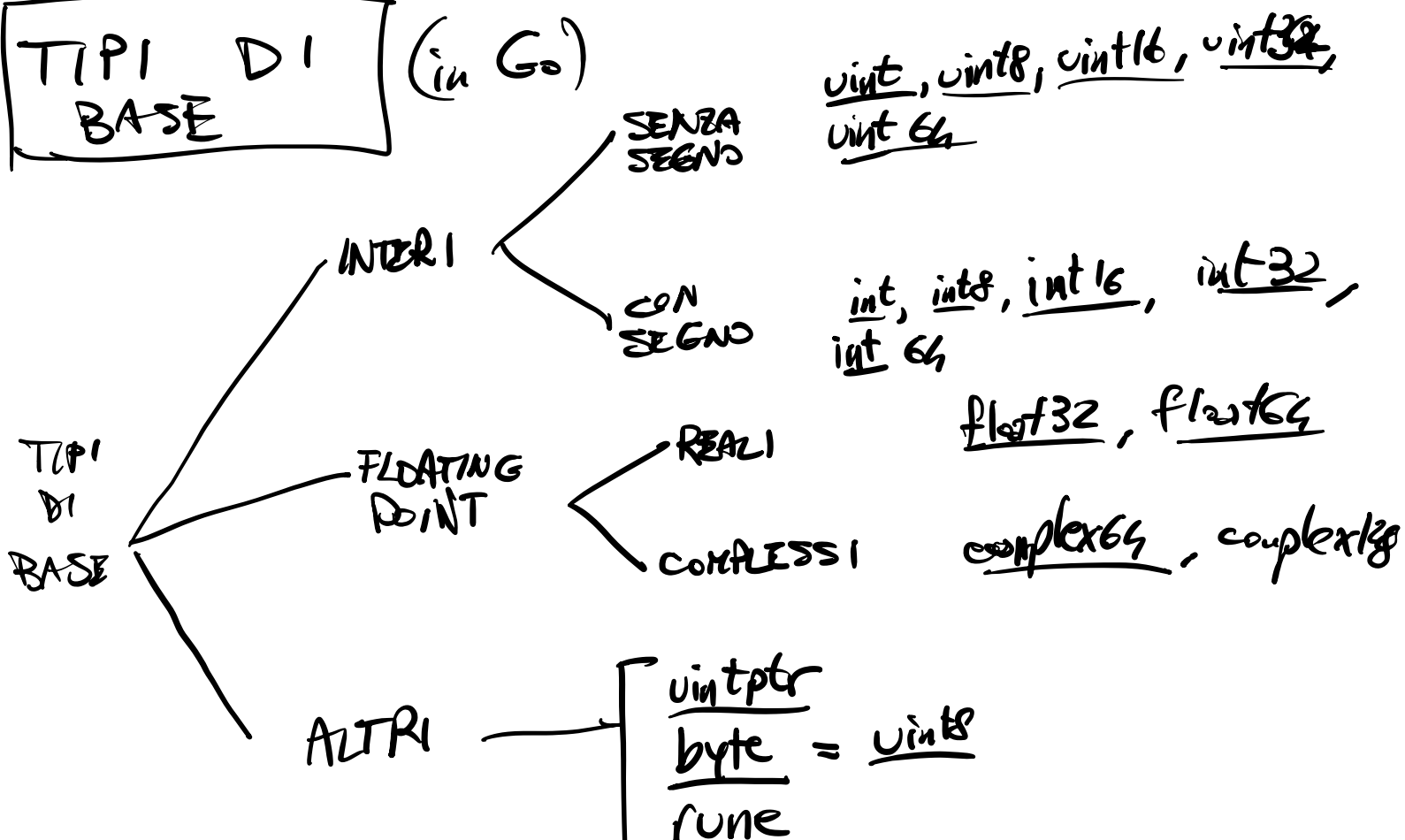
RAPPRESENTAZIONE DI DATI

DIGITALE



TIPICI DI BASE

(in Go)

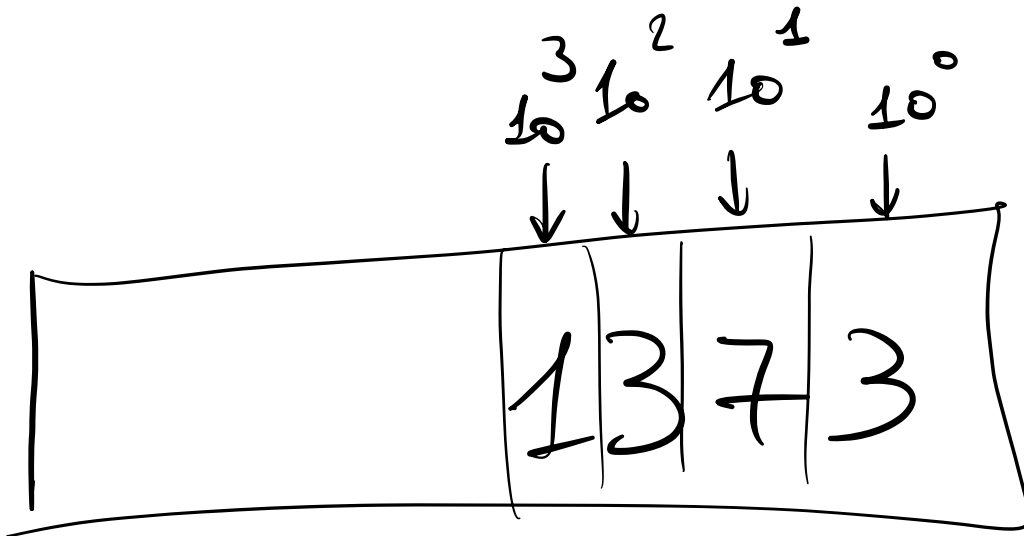


string
bool
error

INTERI SENZA SEGNO

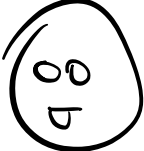
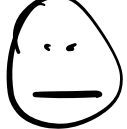
31 } numeri
 XXXX1

NOTAZIONE
 POSIZIONALE
 IN BASE
 10



BASE 10

0 1 2 3 ... 9

7^3	7^2	7^1	7^0
			
4	1	0	0

BASE 7

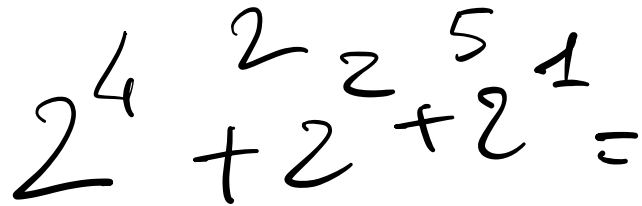
						
0	1	2	3	4	5	6

$$4 \times 7^3 + 1 \times 7^2 = 1421$$

$$4100_7 = 1421_{10}$$

BASE 2

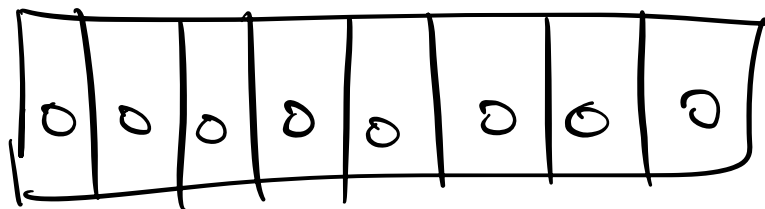
0 1



37	1
18	0
9	1
4	0
2	0
1	1
0	

↑

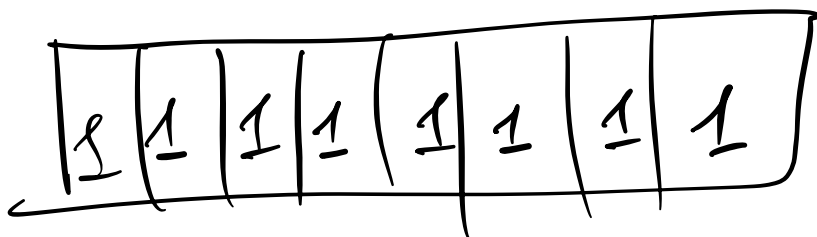
$$100101_2 = 37_{10}$$



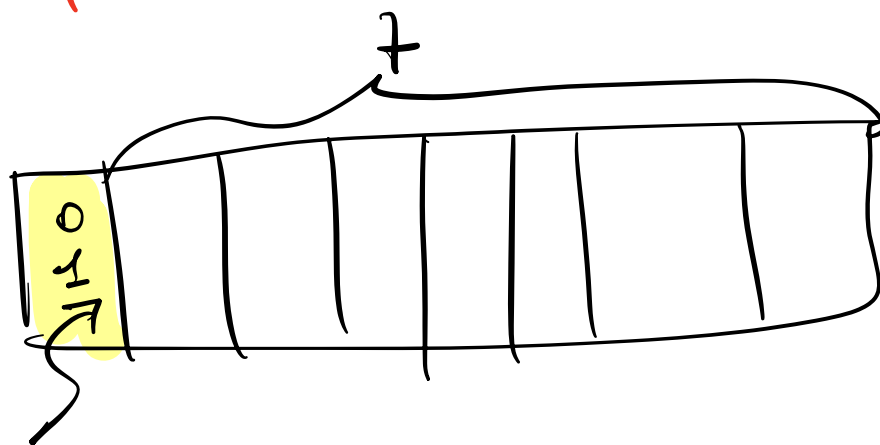
0



255



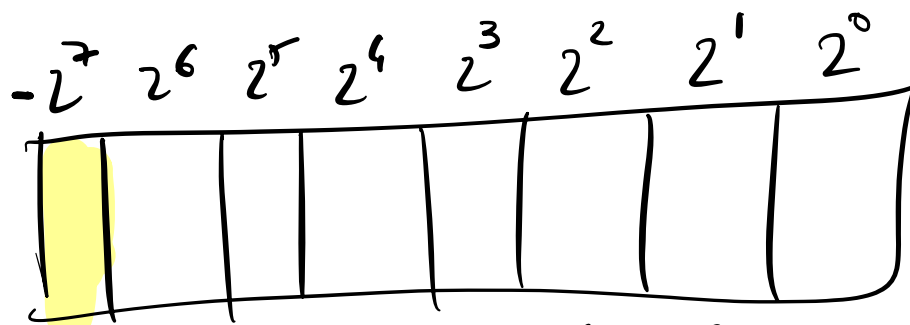
INTERI CON SEGNO



BIT
di

SEGNO

RAPPRESENTAZIONE IN
COMPLEMENTO A 2



-128 64 32 16 8 4 2 1

1 0 0 0 0 0 0 0

-128

1 1 1 1 1 1 1 1
0 0 0 0 0 0 0 0

-1
0

0 1 1 1 1 1 1 1

127

ESERCIZI

— Distanza in giorni di
una data letta in
ingresso dall'epoca

(1/1/1970)

— Sequenza di Collatz

$$x \mapsto \begin{cases} x/2 \\ 3x+1 \end{cases}$$

se x è pari

altrm.

7 $\rightarrow$ 22 $\rightarrow$ 11 $\rightarrow$ 34 $\rightarrow$ 17
 $\rightarrow$ 52 $\rightarrow$ 26 $\rightarrow$ 13 $\rightarrow$ 40
 $\rightarrow$ 20 $\rightarrow$ 10 $\rightarrow$ 5 $\rightarrow$ 16
 $\rightarrow$ 8 $\rightarrow$ 4 $\rightarrow$ 2 $\rightarrow$ ①

Dato n , stampa la
sequenza di Colletz con
serie n

- $\pi(x) =$ "numero di primi
 $\leq x$ "

$$\pi(x) \sim \frac{x}{\ln x}$$

1) Calcolare $\pi(x)$ al
crescere di x e
stamparli

2) Calcolare e stampare
$$\frac{\pi(x)}{x / \ln x}$$