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BINARY ADDITION

if 2 → place 0, carry 1
if 3 → place 1, carry 1
if 4 → place 0, carry 0, carry 1

TWO'S COMPLEMENT

• use one's complement
  ↳ invert & add 1 to least
  significant

RUSSIAN PESANT

21×6 add odd #s,

| 21 | 6 |

| 10 | 12 | $6 + 24 + 96$

| 5 | 24 | $= 126$

| 2 | 48 |

| 1 | 96 |

BINARY → DECIMAL

$56 \rightarrow 0$ 111000
$28 \rightarrow 0$ $(1 \cdot 2^5) + (1 \cdot 2^4) +$
$14 \rightarrow 0$ $(1 \cdot 2^3) + (0 \cdot 2^2) +$
$7 \rightarrow 1$ $(0 \cdot 2^1) + (0 \cdot 2^0)$
$3 \rightarrow 1$
$1 \rightarrow 1$

INDEXING

name[0] → first letter "B" of Ben
slicing [0:3] → start at 0, end @ 3, no 3
         [1:] → tail, start at 1 → end

list (MAP (function, list))
              ↓
         applies function to list

Reduce → functools
reduce (function, list)

FILTER (function, list)

list(filter (lambda x : x > 4, lst)) → returns greater than 4
lambda x : x + 4 ← function
         ↑
      variable

PLEDGE : I pledge my honor that I have abided by
the Stevens Honor System.
Date: 10/21/2020   Signature: