

Reading the Abacus Part 1 – Russian Schoty

The Russian schoty is type of abacus (counting tool) that is used by sliding threaded beads along horizontal wires. An example schoty would have 7 wires, each holding 10 beads. Each bead, when moved to the left, would count as 1 unit. Starting from the bottom wire and moving up, the units increase by a factor of 10. If we use "O" for a bead and "-" to show the wire, we can represent the schoty as follows:

```
---0000000000 millions
---0000000000 hundred-thousands
---0000000000 ten-thousands
---0000000000 thousands
---0000000000 hundreds
---0000000000 tens
---0000000000 ones
```

To read the number, we count the beads on the left-hand side of each wire. In the example below, the number is 501264:

```
---0000000000 0
00000---00000 5
---0000000000 0
O---0000000000 1
OO---000000000 2
000000---0000 6
0000---000000 4
```

Task: Given an array of strings representing each wire in the schoty, return the number being displayed.

Examples:

```
schoty([
  "---0000000000",
  "---0000000000",
  "---0000000000",
  "000---0000000",
  "O---000000000",
  "000000000---O",
  "00---00000000"
]) → 3192
```

```
Schoty({  
  "00---00000000",  
  "0---000000000",  
  "0000---00000",  
  "---0000000000",  
  "---0000000000",  
  "---0000000000",  
  "---0000000000"  
}) → 2150000
```

Note: This challenge ignores the traditional 4-bead wires used for quarter-ruble and quarter-kopek calculations.

Reading the Abacus Part 2 – Japanese Soroban

The Japanese soroban is type of abacus (counting tool) that is used by sliding threaded beads up and down wires. The soroban is divided into an upper deck (where each bead is worth 5 units) and a lower deck (where beads are worth 1 unit). Working from the right and moving to the left, units increase by a factor of 10. If we use "O" for a bead and "|" to show the wire, we can represent the soroban as follows:

0000000

|||||| Upper deck

----- Dividing line

|||||| Lower deck

0000000

0000000

0000000

0000000

To read the number, we count the value of the number of beads that have been moved towards the dividing line. The values for the upper and lower deck are added together. In the example below, the number is 30651:

0000||0

||||00|

||0|0|0

0000|0|

0000000

00|0000

0000000

0000550 Upper deck

0030101 Lower deck

30651 Total

Task: Given a list of strings representing the soroban, return the number being displayed.

Examples:

```
Soroban(new string[] {  
    "0000|0",  
    "|||00",  
    "-----",  
    "|||000",  
    "0000000",  
    "000|000",  
    "00000|0",  
    "000000|"   
}) → 2584
```

```
Soroban(new string[] {  
    "||00|0",  
    "00|00",  
    "-----",  
    "00|00|",  
    "000|000",  
    "0000|00",  
    "|000000",  
    "0|00000"   
}) → 8901750
```