

2021 New Year Contest

Hints

2021-01-01



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M21A0 Convert it to base 10

M21A0 - Convert it to base 10

Do you know what to convert to base 10 now?

From which base? (It's a common base that uses all digits and letters)

M21A1 Connected Components

Imagine writing the string on a blank sheet of paper...

The ink divides the blank region into components

Count how many extra components each letter creates

M21A2 code.zip

The inputs are related to locations.

There are 50 possible outputs.

More hints can be revealed by highlighting the text below:

M21A3 Guess the Leader

10-player game

K-th digit tells who wins the K-th round

Tie breaking: $9 > 8 > 7 > 6 > 5 > 4 > 3 > 2 > 1 > 0$

M21A4 TONEMONO

TONEMONO -> TONE MONO -> MONOTONE

“Do the same” to the input sequence!

When is the output -1?

M21A5 Indlst1ngu1shable

1 is just 1

What do I (uppercase i) and l (lowercase L) remind you of?

L = 50 (I = 1, V = 5, X = 10...)

M21A6 HKOI Online Judge

Go to HKOI Online Judge

Observe (or guess) the welcome message pattern!
(You can try logging in at midnight to observe...)

For some of those who got **Accepted**: in C++, `530<=0600` returns `false`

M21A7 Rainbow Scrabble

Title and input format should remind you of Scrabble rules

Each “tile” carries some points, but it’s not ordinary Scrabble points...

How does “rainbow” play a part?

More hints can be revealed by highlighting the text below:

M21A8 -?+|?

Inputs are “pairs of integers” -- coordinates

Given two points on the plane, you need to check -?+|?

(-?) + (|?)

M21A9 Does input exceed 9-bit integer range?

Usually we care about 32-bit integer range...

How does 3^2 -bit become 9-bit?