

IAmCu*e

Author: Gil Makmel

Challenge ×

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100000

Saying goodbye can be difficult

`nc 18.197.75.101 1337`

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This challenge gives you a command to connect to a server: `nc 18.197.75.101 1337`

When you access it, a grid appear with strange characters set and 6 square 3*3 in form of cross. It only offers you to enter input in Base12. Sending input get the grid to move. Moreover, the grid is in a form of cross and looks very close to a flatted cube. Combining both information, we found similarities with Rubik's Cube. Let's analyze it in order to identify movement defined by each char.

Let's verify it by simple check: four time the same input should lead to go back to original form.

```

          rF rG o0
          gC w0 oU
          y& g- yH

yI oI gS   oR wT bE   rB y0 bR   y0 bE gL
oT oN yK   gE gE rA   yT rW rA   wT bT wG
o- bE wI   gE bI wU   b- r0 w!   rL bY wY

          oH w0 rG
          yS yR gN
          bS o: gF

Please enter an input in Base-12: 4444

          rF rG o0
          gC w0 oU
          y& g- yH

yI oI gS   oR wT bE   rB y0 bR   y0 bE gL
oT oN yK   gE gE rA   yT rW rA   wT bT wG
o- bE wI   gE bI wU   b- r0 w!   rL bY wY

          oH w0 rG
          yS yR gN
          bS o: gF

Please enter an input in Base-12: █

```

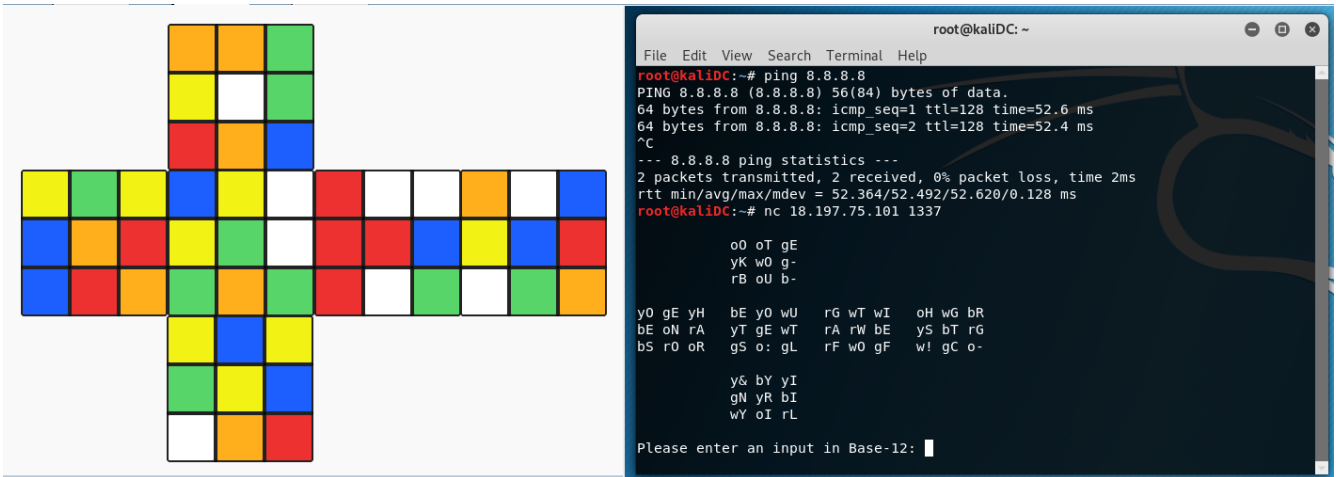
Playing around with the inputs, we figured out the 12 possible movements:

Input	Movement	RubiksCubeSolver Input
0	Up	U
1	Reverse_Up	U'
2	Down	D
3	Reverse_Down	D'
4	Front	F
5	Reverse_Front	F'
6	Back	B
7	Reverse_Back	B'
8	Right	R
9	Reverse_Right	R'
a	Left	L
b	Reverse_Left	L'

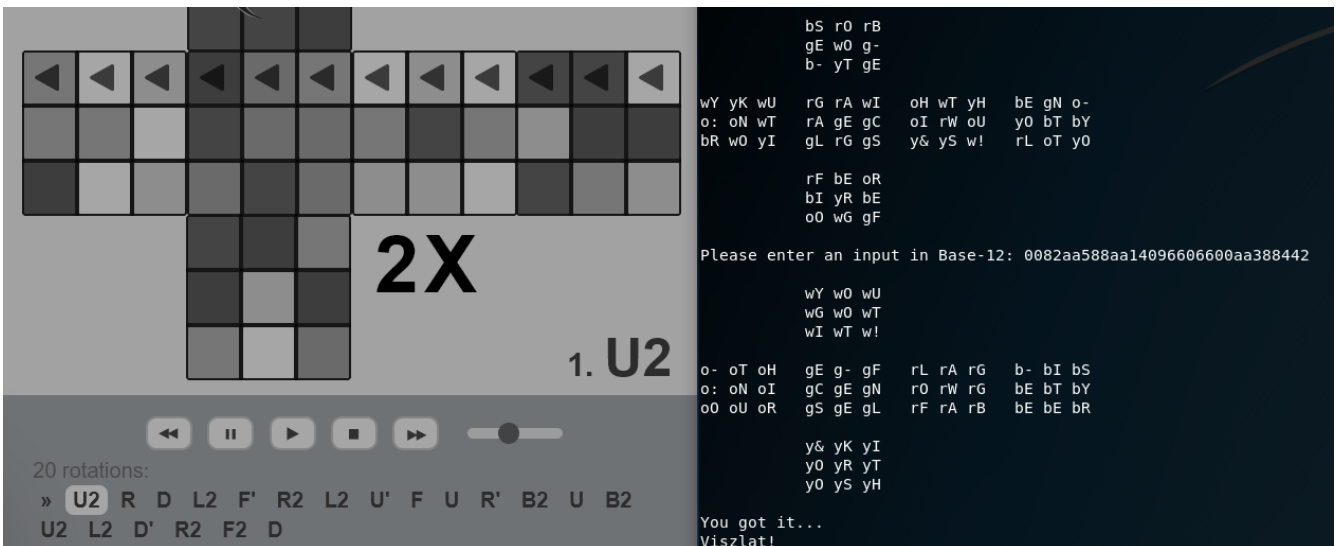
Now that we know the effect of input on the grid, we need to understand the meaning of every 2-character on the grid. In fact, the lowercase first char looks like the name of the color of the case. For now, the meaning of the second character is not clear.

Let's first solve this Rubik's cube.

In order to solve it, we found a solver in Google: <https://rubiks-cube-solver.com/>



This site allows us to enter the cube state as it is in our instance of the game and it generates a solution to solve it. Let's solve it using our table and this solution. Each move of the solution is corresponding to a specific character in our game.



Once solved, we find out the use of the second character: we can read from left to right and top down the following message: You got it! - The - Flag - is: NICENOWGETYOURSELFABEER&KIORTOSH

Congratulation!