Each line of numbers is the ascii value of the character in the flag encoded in a different base. The base of each number corresponds to the Radical of the character’s position in the flag string. This starts from 1, as one cannot encode in base 0.

The Radical of an integer is defined as the product of the distinct prime numbers dividing n (Wikipedia)

The first 18 numbers of the sequence are all that are needed to solve this challenge.

1, 2, 3, 2, 5, 6, 7, 2, 3, 10, 11, 6, 13, 14, 15, 2, 17, 6

The most straightforward way to find the flag is to convert each base into a commonly used base (i.e. base 2, 10, or 16) using a tool like <https://www.dcode.fr/base-n-convert>, or a custom base conversion tool.

Wrap the resulting string in ISTS{}, and the challenge is solved:

ISTS{ Viva\_la\_R3V0LUC10N}

Helpful Links:

<https://en.wikipedia.org/wiki/Radical_of_an_integer>

<http://www.asciitable.com/>

[https://www.dcode.fr/base-n-convert](https://www.dcode.fr/base-n-convert%20/)

<http://www.math.com/tables/general/base_conv.htm>

<http://www.maths.surrey.ac.uk/hosted-sites/R.Knott/IntegerReps/intreps.html>

11111111111111111111111111111111111111111111111111111111111111111111111111111111111111 (86:V)1

1101001 (105:i)2

11101 (118:v)3

1100001 (97:a)2

340 (95:\_)5

300 (108:l)6

166 (97:a)7

1011111 (95:\_)2

10001 (82:R)3

51 (51:3)10

79 (86:V)11

120 (48:0)6

5b (76:L)13

61 (85:U)14

47 (67:C)15

110001 (49:1)2

2e (48:0)17

210 (78:N)6