

MysteryTwister C3

THE CRYPTO CHALLENGE CONTEST

DOUBLE COLUMNAR TRANSPOSITION – RELOADED (PART 1)

Authors: A. Wacker, B. Esslinger, K. Schmeh

December 2013

Introduction

After the level X challenge "Double Columnar Transposition" was solved for the first time (using some remarkable new ideas), we decided to create a series of new double columnar transposition challenges. In these new level III challenges we considered the newly discovered vulnerabilities and created three new ones with increasing difficulty.

Challenge

NNAFTEUEREAFSITAAIEHNSBNEODFIIAHENSNRERRLDEOFULZNASY
HRSELNEWEENSNDERRTEIOSORNOELOOHLQPSSKWITRACIWOITEEEO
TTWNOIBETLORLTYPLIHOOVMWLNRSBEEOILEESRKOENELTOELWETN
TECAABCIIGENNYAEBEWTHLBREHBATIGEONCNITOCICPNKENHTWAT
GBHMSITSHROELHKRADNRTHEYNTRFOTONOOTYREOCREGCUNRLNGOR
REFLHTTBRWIEDPEORHNL CWAAMHLISWLVEIDSEGIEALBESEMYAOAA
HARERNNNIEHANSYWSRTTBRIELDESTCTNLWVRHDNANIFSEHDRNVSH
UIULIUWBLETARBNNIOFWDTHOCIEHTHHETHODNROLSIIIBIHPAATB
WNUETIWNHNSIESHRRCITPHHAELRWYTDEREBNISOINIEPNRTHWAT
IFGACCFHWPSAUDRXARLYOUEUBBIGFETLDGRADCENNSMEOIHGENHN
OELHORASLHTADEEORDSEIEHWONTHEFTALIGWBKTOKLERDWORPNAE
NSEPWEEEEELIIMTEESTIOISATAVACHHVOEESLNOHSR

The solution consists of the first 34 characters of the original English plaintext in capital letters without any spaces.

Hints

- ▶ The key length for both keys is 20 - 27 characters.
- ▶ The key lengths are co-prime (as with the original level X challenge).
- ▶ The keys are derived from English sentences.
- ▶ The plaintext is in English.
- ▶ You can download an additional file that contains only the ciphertext.
- ▶ As an exercise, consider the following level I challenge: [1].
- ▶ The original level X challenge can be found under [2].

[1] <https://www.mysterytwisterc3.org/en/challenges/level-i/double-columnar-transposition>

[2] <https://www.mysterytwisterc3.org/en/challenges/level-x/double-column-transposition>