1. Decrypt a text using a transposition cipher.

Transposition belongs to the basic methods of encryption. Its principle is changing the position of a character in text. An example of transposition cipher is so-called Fleissner grille that you can see in the picture below. This encryption system, invented in the 16th century, was described by Jules Verne in his novel Mathias Sandorf.

The following message has been encrypted using a simple transposition cipher. In order to decrypt it we need to prepare a decryption grille. The decryption is made by correct movements of the grille and gradual reading of characters that can be seen through its windows.

Write the ciphertext to the empty grid (below) – left to right and top to bottom. Set the decryption grille. Read and note the visible characters; then rotate the grille by 90° and repeat the procedure (three times). Correct results can be obtained only if the initial placement of the grille and the direction of its rotation are also correct.

**Attention!** Note that the grille can be rotated clockwise or counterclockwise, and you do not know its initial position.

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| --- |
| WRNSA ERIUM ASMYR DIEUL DIAXB XRYRT IHXGX RXNEX GGEXW IXOLR LRXME XLSXW DEXA |
| **SIMILAR GRILLES WERE USED BY THE GERMAN ARMY DURING WORLD WAR I** |

**In the initial position was the upper edge of the grille (marked with the bold line) on the right. During the encryption the grille was turning to the right (clockwise). The division of the ciphertext to blocks has historical reasons, as the payment or transmission was based on the number of words (not characters), while the average word length in English language is 5 characters. The text does not contain special (national) characters.**

SIMILAR GRILLES

**mrizka2_reseni_a.eps**

**E**

**W**

**S**

**E**

**L**

**L**

**I**

**R**

**R**

**A**

**I**

**L**

**G**

**M**

**I**

**S**