

IT-Security Cryptography and Secure Communications

Excercise: Classical Encryption Techniques

Lecturer: Prof. Dr. Michael Eichberg

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Playfair Cipher

Decrypt the ciphertext: XGAWMGAZ. The password is MONARCHY (as used in the slides.)

Vigenère Cipher

Let's assume that you got one plaintext / ciphertext pair.

P: secret
C: HSFGSW

- 1. Can you recover the key?
- 2. What type of attack were you able to perform?

Rail-fence Cipher

Encrypt the message: "i love crypto" with the key/depth 3.

Row Transposition Cipher

You received the following message:

YSFRITTUNCOSPJU

Additionally, you were able to extract the key except of one value: 4153.

- 1. How many possible decryptions are possible?
- 2. Can you decrypt the text?
- 3. What is the key?

Steganography

Uncover the text hiden in the spam message.