

Using Ciphers

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What is encryption / decryption?

- **Encryption:** turning a readable text (plain text) into cipher text
- **Decryption:** turning cipher text back into readable text
- Encryption is necessary in protecting the exchange of important information like online shopping etc.

Transposition Cipher



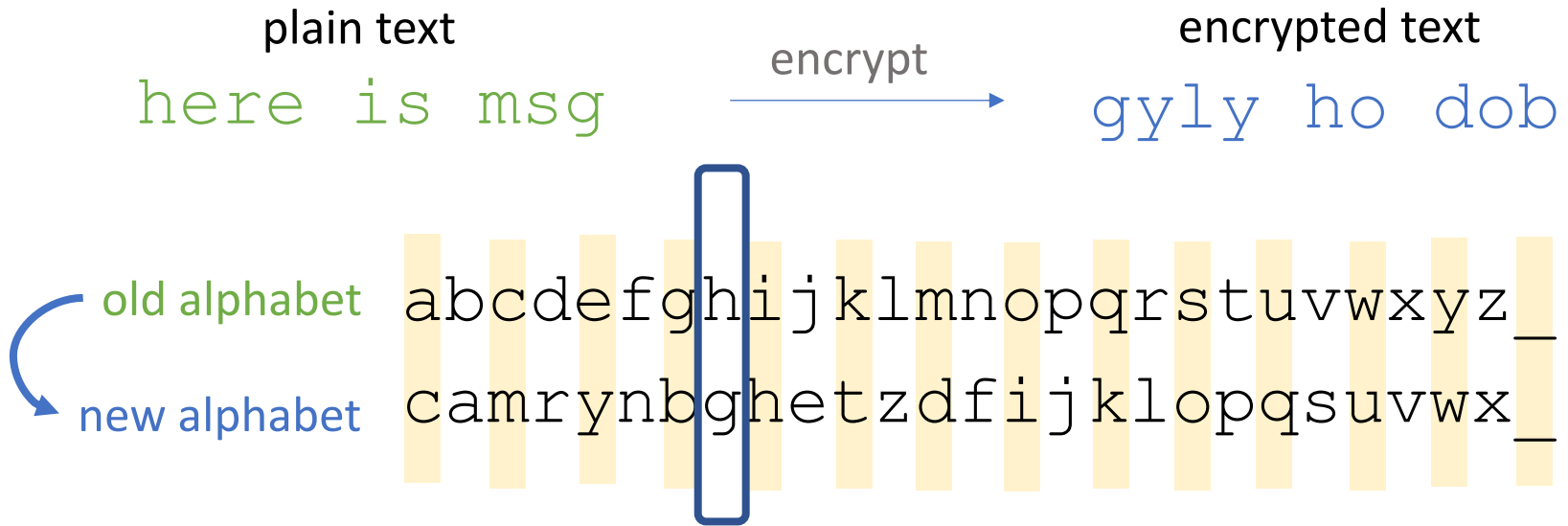
- Separate characters based on odd or even indices
- Put even-indexed characters first, followed by odd-index characters

Transposition Cipher



- Split text in half
- Go through each character in the two split texts
- For each index, add those characters to a string one after other

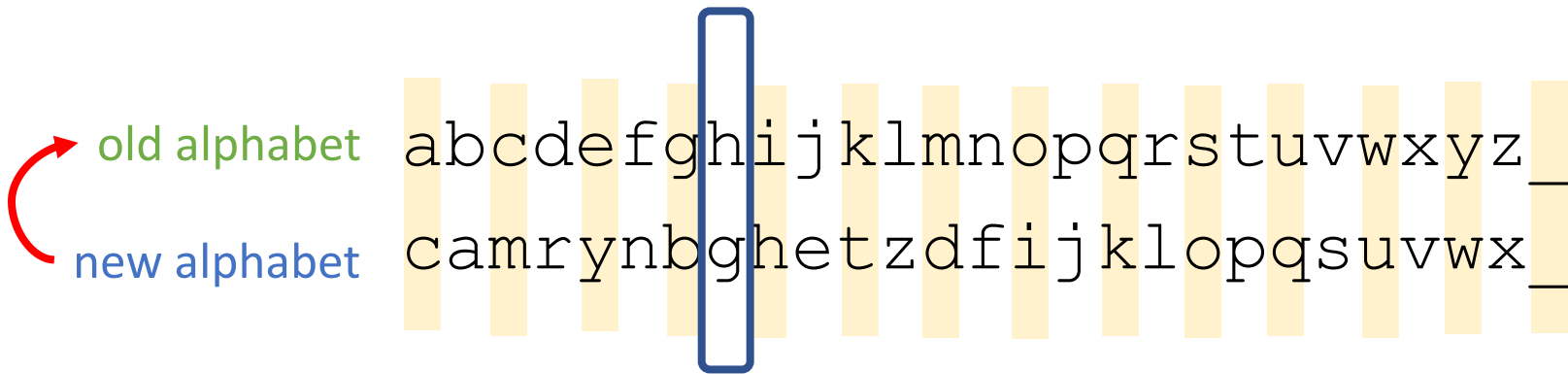
Substitution Cipher



- Use an alternate new alphabet order
- Substitute each character from the **old** alphabet to its corresponding character in the **new** alphabet

Substitution Cipher

encrypted text decrypt plain text
gyly ho dob → here is msg



- Use an alternate new alphabet order
- Substitute each character from the **new** alphabet to its corresponding character in the **old** alphabet