



# Sending Super Secret Messages with Book Cipher

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# 1. Abstract



EXPLORES THE BOOK  
CIPHER: A HISTORICAL  
ENCRYPTION METHOD.



ENCRYPTS MESSAGES USING  
POSITIONS OF LETTERS IN A  
SHARED BOOK.



IMPLEMENTED IN PYTHON  
USING RANDOM SELECTION  
OF LETTER POSITIONS.



FOCUS ON CLASSICAL  
CRYPTOGRAPHY WITH A  
MODERN PERSPECTIVE.

## 2.1 Aim

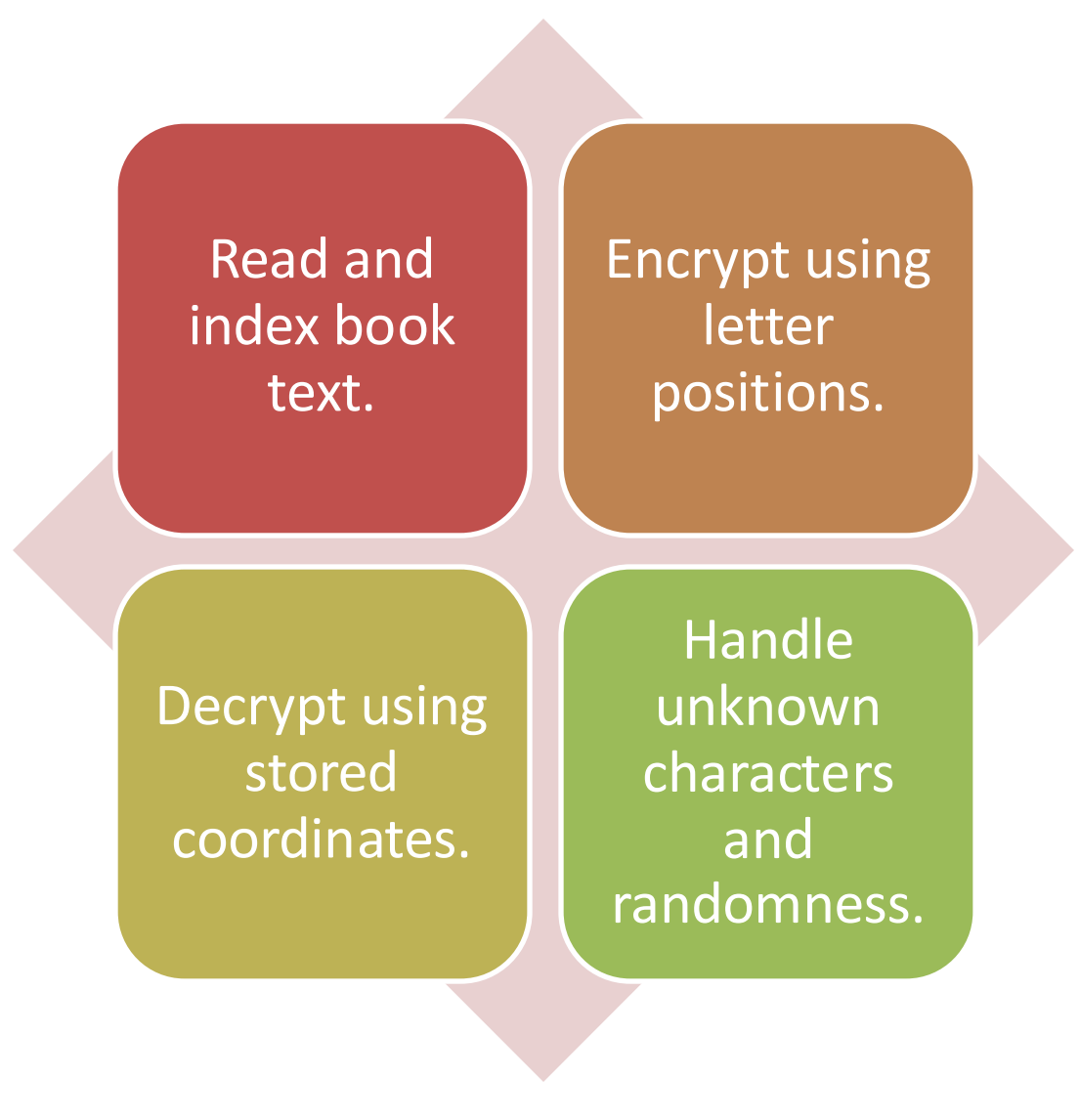


Create a secure communication system using a Book Cipher.



Messages encrypted by converting characters to position coordinates in a shared book.

## 2.2 Scope



## 2.3 Methodology

- Implemented in Python.
- Used text parsing, random module, file I/O.
- Modular functions: `create_index`, `book_cipher`, `book_decipher`.

# 3. Cryptographic Theory



Each character = position in book: page, line, word, letter.



Advantages: high secrecy, simplicity, reusable key.



Challenges: requires identical book, text inconsistencies may break cipher.

# 4. Implementation



Indexing: map characters to book positions.



Encryption: randomly select a position for each character.



Decryption: extract letters using given positions.



Result: effective, robust encryption/decryption.

# 5. Summary

- Goal achieved: functional Book Cipher system.
- Supports reliable message encryption/decryption.
- Future work: case sensitivity, deterministic mode, GUI/web version.