TITLE : File Encryption & Decryption in C

SUBTITLE : MINI PROJECT IN PROGRAMMING USING C

This project explores the fundamental concepts of file encryption and decryption through a hands-on implementation in C

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ABSTRACT :

File encryption and decryption are essential techniques are securing digital data from unauthorized access.

Encryption transforms plain text into unreadable ciphertext using algorithms and encryption keys , ensuring confidentiality and data integrity.

Decryption reverses this process , converting the ciphertext back to its original form when accessed by authorized users with correct key.

CORE MODULE :

1. ENCRYPTION MODULE

- Applies an encryption algorithm (e.g. XOR , AES , or RSA)
- Uses a key to transform plain text into ciphertext

2. DECRYPTION MODULE :

Reverse the encryption process using the correct decryption key

Converts ciphertext back to plain text

Expected Project Output

1

Encryption

Input file: Plain text data.

Output file: Encrypted data.

Program displays encryption key.

2

Decryption

Input file: Encrypted data.

Output file: Original plain text.

Program uses same key for decryption.

Project Success Factors

1

Robust Encryption

Ensuring the encryption process effectively transforms data into an unreadable format.

2

Accurate Decryption

Confirming the decryption process reliably restores the original data.

3

Efficient Code

Optimizing code for speed and resource usage.

THANK YOU !