

Encryption Hands-on

1. Encryption

```
Windows PowerShell
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Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Akash\Desktop\College\Projects\CS_Week1\Day03> openssl enc -aes-256-cbc -salt -in test.txt -out encrypted.txt
enter AES-256-CBC encryption password:

Verifying - enter AES-256-CBC encryption password:

*** WARNING : deprecated key derivation used.
Using -iter or -pbkdf2 would be better.
PS C:\Users\Akash\Desktop\College\Projects\CS_Week1\Day03>
```

2. Decryption

```
Windows PowerShell
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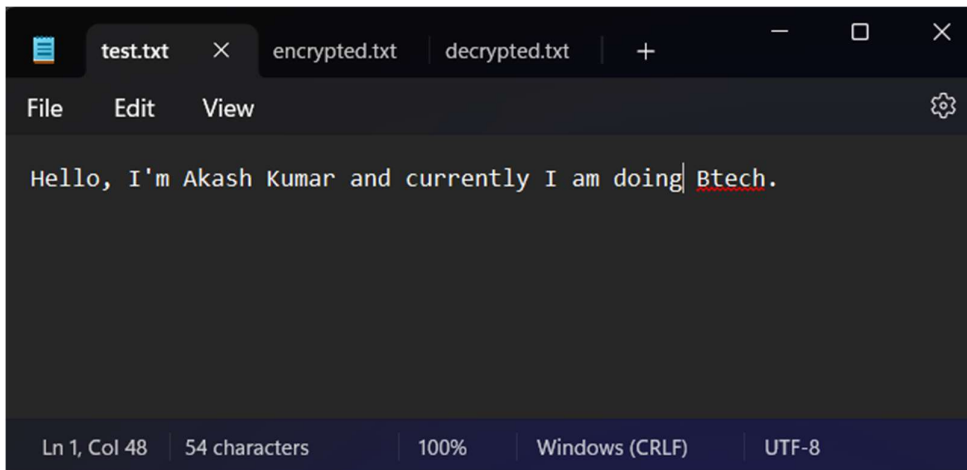
Install the latest PowerShell for new features and improvements! https://aka.ms/PSWindows

PS C:\Users\Akash\Desktop\College\Projects\CS_Week1\Day03> openssl enc -d -aes-256-cbc -in encrypted.txt -out decrypted.txt
enter AES-256-CBC decryption password:

*** WARNING : deprecated key derivation used.
Using -iter or -pbkdf2 would be better.
PS C:\Users\Akash\Desktop\College\Projects\CS_Week1\Day03>
```

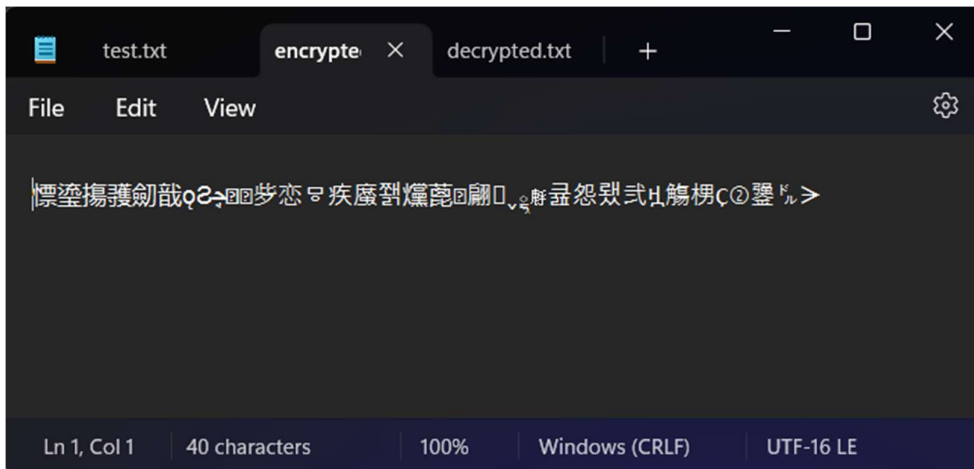
Verification

1. Test File



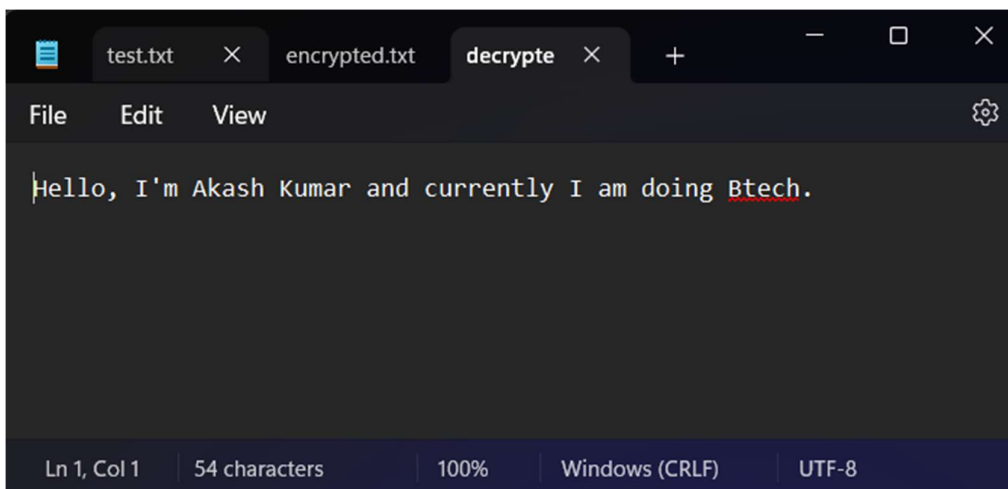
A screenshot of a text editor window with three tabs: 'test.txt', 'encrypted.txt', and 'decrypted.txt'. The 'test.txt' tab is active. The text inside the editor is 'Hello, I'm Akash Kumar and currently I am doing Btech.'. The status bar at the bottom shows 'Ln 1, Col 48', '54 characters', '100%', 'Windows (CRLF)', and 'UTF-8'.

2. Encrypted File



A screenshot of a text editor window with three tabs: 'test.txt', 'encrypte', and 'decrypted.txt'. The 'encrypte' tab is active. The text inside the editor is a garbled string of characters, representing the encrypted content. The status bar at the bottom shows 'Ln 1, Col 1', '40 characters', '100%', 'Windows (CRLF)', and 'UTF-16 LE'.

3. Decrypted File



A screenshot of a text editor window with three tabs: 'test.txt', 'encrypted.txt', and 'decrypte'. The 'decrypte' tab is active. The text inside the editor is 'Hello, I'm Akash Kumar and currently I am doing Btech.', which matches the original text in the first screenshot. The status bar at the bottom shows 'Ln 1, Col 1', '54 characters', '100%', 'Windows (CRLF)', and 'UTF-8'.