Module 2: Sequences and File Operations

Case Study – 3

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Domain – Telecom

focus – Optimization

Business challenge/requirement
LifeTel Telecom is the latest entrant in the highly competitive Telecom market of Singapore. It issues SIM to the verified users. Till now verification was manual through the photocopy of the approved id card document. However, the government has recently introduced a Social ID called Reference ID which is mapped to the fingerprint of the user. LifeTel should now verify the user against the fingerprint and Reference ID

Key issues
Build a system where when a user enters Reference ID it is encrypted so that hackers cannot view the mapping of Reference ID and fingerprint

Considerations
The system should be secure

Data volume
- NA

Additional information
- NA

Business benefits
The company will be able to quickly issue SIM to the user and the expected gain in volume is approximately 10 times as the manual process of verification is replaced with a secure automated system

Approach to Solve
You must use the fundamentals of Python taught in module 1

1. Read the input from the command line – Reference ID

2. Check for validity – it should be 12 digits and allows for number and alphabet
3. Encrypt the Reference ID and print it for reference

Enhancements for code

You can try these enhancements in code

1. Allow some special characters in ReferenceID
2. Give the option for decryption to the user