

INSTITUTE OF COMPUTER TECHNOLOGY

B-TECH COMPUTER SCIENCE ENGINEERING 2025-26

SUBJECT: CRYPTOGRAPHY

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BRANCH: CYBER SECURITY

BATCH: 52

PRACTICAL_1

Aim: To understand the fundamentals of encryption and decryption by implementing a basic or standard encryption algorithm that takes a user-inputted password, converts it into ciphertext, and then decrypts it back to its original form, displaying both ciphertext and original text in the console.

Source Code:

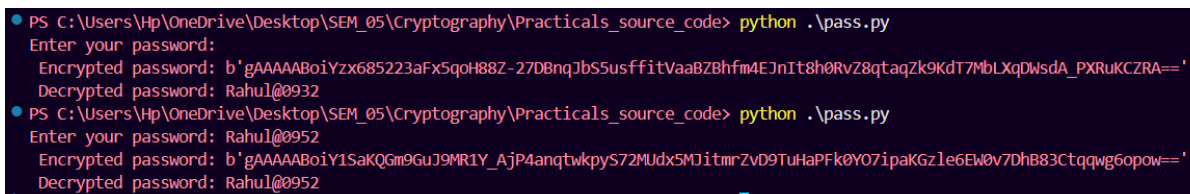
```
from cryptography.fernet import Fernet
import getpass

key = Fernet.generate_key()
cipher = Fernet(key)

password = getpass.getpass("Enter your password: ").encode()
encrypted = cipher.encrypt(password)
print(" Encrypted password:", encrypted)

decrypted = cipher.decrypt(encrypted)
print(" Decrypted password:", decrypted.decode())
```

OUTPUT:-



```
PS C:\Users\Hp\OneDrive\Desktop\SEM_05\Cryptography\Practicals_source_code> python .\pass.py
Enter your password:
Encrypted password: b'gAAAAABoiYzx685223aFx5qoH88Z-27DBnqJbS5usffitVaaBZBhfm4E3nIt8h0RvZ8qtaqZk9KdT7MbLXqDwsdA_PXRuKCZRA=='
Decrypted password: Rahul@0932
PS C:\Users\Hp\OneDrive\Desktop\SEM_05\Cryptography\Practicals_source_code> python .\pass.py
Enter your password: Rahul@0952
Encrypted password: b'gAAAAABoiY1SaKQgm9GuJ9MR1Y_Ajp4anqtwkpyS72MUdx5MJitmRZvd9TuHaPFk0Y07ipaKgZle6EW0v7DhB83Ctqqwg6opow=='
Decrypted password: Rahul@0952
```