EXPERIMENT NO: 1(d)

Data visualization

Conduct an experiment to encrypt and decrypt given sensitive data

Aim:

To encrypt and decrypt sensitive data using Python's cryptography library to ensure data security.

Algorithm:

1. Import the required modules from the cryptography library.
2. Generate a symmetric encryption key using Fernet.
3. Encrypt the given sensitive data with the key.
4. Decrypt the encrypted data back to its original form.
5. Display the encrypted and decrypted data.

Program:

```
[6]: from cryptography.fernet import Fernet
key = Fernet.generate_key()
fernet = Fernet(key)
key
data = "Sensitive Data: Employee Salary = ₹80,000"
encoded_data = data.encode()
encrypted_data = fernet.encrypt(encoded_data)
encrypted_data
decrypted_data = fernet.decrypt(encrypted_data).decode()
decrypted_data

[6]: 'Sensitive Data: Employee Salary = ₹80,000'
```

Result:

Thus, the Python code to encrypt and decrypt sensitive data using the cryptography library is successfully executed.