## ****Eldohub Data Science Department:****

## ****Individual Weekend Takeaway Assignment****

**Project Title:** Password Vault – A Simple Local Password Manager

**Project Description:**  
Build a command-line tool that lets users store, retrieve, and manage their passwords locally. The passwords should be encrypted before saving.

### 🛠 Features:

* Add a new password entry (name, username, password)
* Retrieve password using a keyword
* Delete password entry
* Encrypt and decrypt passwords using a basic encoding/decoding method (e.g., Fernet or base64)
* Save/load password vault using file (JSON or text)

### 🔁 Concepts Practiced:

* File handling
* Dictionaries, functions
* Exception handling
* Basic string encryption logic
* Testing and assertions

### 🧠 Principles to Apply:

* DRY, YAGNI
* Input validation and docstrings
* Git commits with meaningful messages
* Reproducibility: README file with how to run