Code:

import sqlite3

from cryptography.fernet import Fernet

import os

def generate\_key():

    if not os.path.exists("secret.key"):

        key = Fernet.generate\_key()

        with open("secret.key", "wb") as key\_file:

            key\_file.write(key)

    else:

        with open("secret.key", "rb") as key\_file:

            key = key\_file.read()

    return key

def load\_key():

    return open("secret.key", "rb").read()

def encrypt\_password(password, key):

    f = Fernet(key)

    return f.encrypt(password.encode()).decode()

def decrypt\_password(encrypted\_password, key):

    f = Fernet(key)

    return f.decrypt(encrypted\_password.encode()).decode()

def create\_connection():

    conn = sqlite3.connect("password\_manager.db")

    c = conn.cursor()

    c.execute('''CREATE TABLE IF NOT EXISTS passwords

                 (id INTEGER PRIMARY KEY, service TEXT, username TEXT, password TEXT)''')

    conn.commit()

    return conn

def add\_password(service, username, password, key):

    conn = create\_connection()

    c = conn.cursor()

    encrypted\_password = encrypt\_password(password, key)

    c.execute("INSERT INTO passwords (service, username, password) VALUES (?, ?, ?)", (service, username, encrypted\_password))

    conn.commit()

    conn.close()

def retrieve\_passwords(key):

    conn = create\_connection()

    c = conn.cursor()

    c.execute("SELECT service, username, password FROM passwords")

    data = c.fetchall()

    conn.close()

    decrypted\_data = [(service, username, decrypt\_password(password, key)) for service, username, password in data]

    return decrypted\_data

def menu():

    key = generate\_key()

    key = load\_key()

    while True:

        print("\nPassword Manager")

        print("1. Add new password")

        print("2. View stored passwords")

        print("3. Exit")

        choice = input("Choose an option: ")

        if choice == "1":

            service = input("Enter service (e.g., Gmail): ")

            username = input("Enter username: ")

            password = input("Enter password: ")

            add\_password(service, username, password, key)

            print("Password added successfully!")

        elif choice == "2":

            passwords = retrieve\_passwords(key)

            for service, username, password in passwords:

                print(f"Service: {service}, Username: {username}, Password: {password}")

        elif choice == "3":

            print("Exiting...")

            break

        else:

            print("Invalid choice! Please try again.")

if \_\_name\_\_ == "\_\_main\_\_":

    menu()

output:

