import tkinter as tk  
from tkinter import messagebox  
from cryptography.fernet import Fernet  
  
def generate\_key():  
 return Fernet.generate\_key()  
  
def encrypt\_password(key, password):  
 f = Fernet(key)  
 return f.encrypt(password.encode()).decode()  
  
def decrypt\_password(key, encrypted\_password):  
 f = Fernet(key)  
 return f.decrypt(encrypted\_password.encode()).decode()  
  
passwords = {}  
  
def add\_password():  
 service = service\_entry.get()  
 username = username\_entry.get()  
 password = password\_entry.get()  
  
 if service and username and password:  
 encrypted\_password = encrypt\_password(key, password)  
 passwords[service] = {'username': username, 'password': encrypted\_password}  
 messagebox.showinfo("Success", "Password added successfully!")  
 else:  
 messagebox.showwarning("Error", "Please fill in all the fields.")  
  
def get\_password():  
 service = service\_entry.get()  
 if service in passwords:  
 encrypted\_password = passwords[service]['password']  
 decrypted\_password = decrypt\_password(key, encrypted\_password)  
 messagebox.showinfo("Password", f"Username: {passwords[service]['username']}\nPassword: {decrypted\_password}")  
 else:  
 messagebox.showwarning("Error", "Password not found.")  
  
key = generate\_key()  
  
instructions = '''To add password fill all the fields and press "Add Password"  
To view password, enter Account Name and press "Get Password"'''  
signature = "Developed by Sai Satwik Bikumandla"  
  
window = tk.Tk()  
window.title("Password Manager")  
window.configure(bg="orange")  
  
window.resizable(False, False)  
  
  
center\_frame = tk.Frame(window, bg="#d3d3d3")  
center\_frame.grid(row=0, column=0, padx=10, pady=10)  
  
instruction\_label = tk.Label(center\_frame, text=instructions, bg="#d3d3d3")  
instruction\_label.grid(row=0, column=1, padx=10, pady=5)  
  
service\_label = tk.Label(center\_frame, text="Account:", bg="#d3d3d3")  
service\_label.grid(row=1, column=0, padx=10, pady=5)  
service\_entry = tk.Entry(center\_frame)  
service\_entry.grid(row=1, column=1, padx=10, pady=5)  
  
username\_label = tk.Label(center\_frame, text="Username:", bg="#d3d3d3")  
username\_label.grid(row=2, column=0, padx=10, pady=5)  
username\_entry = tk.Entry(center\_frame)  
username\_entry.grid(row=2, column=1, padx=10, pady=5)  
  
password\_label = tk.Label(center\_frame, text="Password:", bg="#d3d3d3")  
password\_label.grid(row=3, column=0, padx=10, pady=5)  
password\_entry = tk.Entry(center\_frame, show="\*")  
password\_entry.grid(row=3, column=1, padx=10, pady=5)  
  
  
add\_button = tk.Button(center\_frame, text="Add Password", command=add\_password, height=1, width=10)  
add\_button.grid(row=5, column=4, padx=10, pady=5)  
  
get\_button = tk.Button(center\_frame, text="Get Password", command=get\_password, height=1, width=10)  
get\_button.grid(row=6, column=4, padx=10, pady=5)  
  
signature\_label = tk.Label(center\_frame, text=signature, bg="#d3d3d3")  
signature\_label.grid(row=7, column=1, padx=5, pady=5)  
  
  
window.mainloop()