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Date: 11/14/24

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Sec. 101

Milestone 1:

```
PS C:\Users\rpgre\Downloads> python3 project_cyber_security.py
No users are registered with this client.
Do you want to register a new user (y/n)? y

Enter Full Name: John Doe
Enter Email Address: john.doe@gmail.com
Enter Password:
Re-enter Password:

Passwords Match.
User Registered.
Exiting SecureDrop.
```

Milestone 2:

```
PS C:\Users\rpgre\Downloads> python3 project_cyber_security.py
Enter Email Address: john.doe@gmail.com
Enter Password:
Email and Password Combination Invalid.

Enter Email Address: john.doe@gmail.com
Enter Password:
Welcome to SecureDrop.
Type "help" For Commands.

secure_drop> help
  "add"  -> Add a new contact
  "list" -> List all online contacts
  "send" -> Transfer file to contact
  "exit" -> Exit SecureDrop
secure_drop> █
```

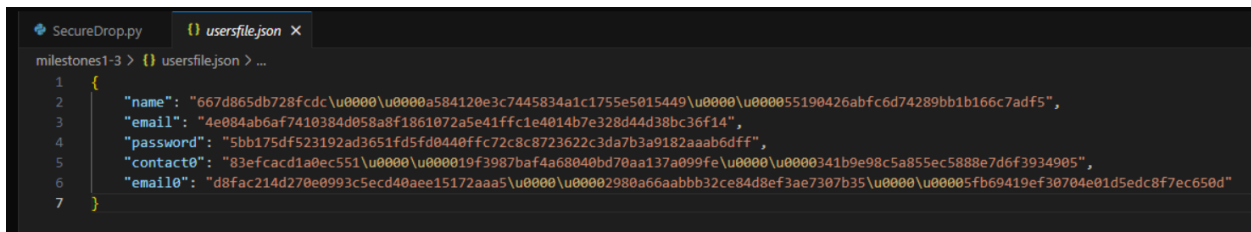
Milestone 3:

```
secure_drop> add
Enter Full Name: Alice
Enter Email Address: alice@gmail.com
Contact Added.
secure_drop> add
Enter Full Name: Bob
Enter Email Address: bob@gmail.com
Contact Added.
secure_drop> 
```

How we are storing the information:

The password and email(username) of the user account is hashed, and the rest of the data, is encrypted using AES in GCM mode using a symmetric key unique to the user account (Their password hash).

The passwords are salted in such a way that they would take years to crack, unless the salt is obtained, but even then, there are decent password complexity requirements in place that would make the password more difficult to offline crack.



```
SecureDrop.py  usersfile.json x
milestones1-3 > {} usersfile.json > ...
1  {
2    "name": "667d865db728fcdc\u0000\u0000a584120e3c7445834a1c1755e5015449\u0000\u000055190426abfc6d74289bb1b166c7adf5",
3    "email": "4e084ab6af7410384d058a8f1861072a5e41ffc1e4014b7e328d44d38bc36f14",
4    "password": "5bb175df523192ad3651fd5fd0440ffc72c8c8723622c3da7b3a9182aaab6dfff",
5    "contact0": "83efcacd1a0ec551\u0000\u0000019f3987baf4a68040bd70aa137a099fe\u0000\u00000341b9e98c5a855ec5888e7d6f3934905",
6    "email0": "d8fac214d270e0993c5ecd40aee15172aaa5\u0000\u000002980a66aabb32ce84d8ef3ae7307b35\u0000\u000005fb69419ef30704e01d5edc8f7ec650d"
7  }
```