

Task 3 Summary to do

Most systems are still reliant on passwords. This task is about developing an implementation of the 3 password commands used within Unix.

The three commands

- `adduser` – creates a new user
- `deluser` – removes an entry from the password file
- `passwd` – allows a user to change their password

When access is required a program called `login` should run – username and password checked if matching against a stored value.

Task

- Implement the 4 commands above – each should be a separate program that uses ONE file to store the data.
 - `adduser`
adds a new entry to the file, which can be anywhere. If the username already exists, an error should be displayed and no changes should be made. Should also gather a real name and password, these do not have to be unique.
 - `deluser`
Removes an entry from the file based on the username. If the username not found needs to display an error that nothing was changed
 - `passwd`
Changes a password for a specified username. A check with the current password should be performed and entering the password twice to check that it works.
If invalid for any reason, the program should not make any changes.
 - `login`
Username and password entered. Program reports if they are valid. Access granted / denied.
- Work for a simplified password file (formatted `ada:Ada Lovelace:password_string`)
first field username all lowercase, second field real name an arbitrary string (String of any length), third is encrypted password. All separated with a :
- Encryption should be done with any method, a simple substitution method is also acceptable, there are no extra marks for doing something complex.

Additional Notes

- Any module from the Python Standard Library is fine to use