

Read session 11.1, 11.2, 11.3, 11.4, 11.5, 11.6, 11.8, 11.9, 11.12 of the following book: <a href="http://www.ict.ru.ac.za/Resources/cspw/thinkcspy3/thinkcspy3.pdf">http://www.ict.ru.ac.za/Resources/cspw/thinkcspy3/thinkcspy3.pdf</a>

And then answer the following questions:

- What is nested list?
- Can a list store both integers and strings in it?

## Serious exercises

1. Implement superuser login

```
huynqs-MacBook-Pro-259:if-else admin$ python login.py
Hi there, this is a superuser gateway
Username: c4x
You are not superuser
huynqs-MacBook-Pro-259:if-else admin$ python login.py
Hi there, this is a superuser gateway
Username: c4e
Password: asdfas
Password is incorrect
huynqs-MacBook-Pro-259:if-else admin$ python login.py
Hi there, this is a superuser gateway
Username: c4e
Password: codethechange
Welcome, c4e
```

- 2. Repeat exercise 1 so that users can try login without running the file again (python login.py) when it fails
- 3. Finish CRUD exercise in class, simulate a clothes shop

```
Welcome to our shop, what do you want (C, R, U, D)? R
Our items: T-Shirt, Sweater

Welcome to our shop, what do you want (C, R, U, D)? C
Enter new item: Jeans
Our items: T-Shirt, Sweater, Jeans

Welcome to our shop, what do you want (C, R, U, D)? U
Update position? 2
New item? Skirt
Our items: T-Shirt, Skirt, Jeans

Welcome to our shop, what do you want (C, R, U, D)? D
Delete position? 3
Our items: T-Shirt, Skirt
```

Handle the exceptions (upper, lower case, index out of range) yourself