**Python stuff to check out:**

function decorators

lambda expressions, list comprehensions and generator expressions

unit testing in Python

<https://docs.python.org/2/library/unittest.html>

key elements of the **unittest** framework: test fixtures, test cases, test suites and test runners.

good pytest youtube video

<https://www.youtube.com/watch?v=LdVJj65ikRY>

Writing Unit tests: (py.test – less code than unittest)

1. Write a test for correct behavior, change your code until it passes. (BUG fixing)
2. Write test(s) for new feature, change your code until it passes.
3. Write tests only for the code you are changing, don’t need to do every possible scenerio.

Pytest install - pip install -U pytest

python –m pytest <filename> -v ; run against specific file and show each test result

python –m pytest –-collect-only ; shows tests it will run but doesn’t run them

python –m pytest –k “not admin”; run all the test except ones with admin in name

python –m pytest –k “admin” ; run only the admin tests (with admin in file name)

python –m pytest <filename> -v –s; verbose (-v) and show output (-s)

get values out of nova list

test=creds.nova.server\_groups.list()

test[0].id

test2=creds.nova.server\_groups.get(test[0].id)

test2.name