Unit testing of the searchAndBuyProduct function

The objective of the searchAndBuyProduct function is to be able to log in a user and view all products or some specific product. When the user is ready to shop the checkoutAndPayment function is called.

The searchAndBuyProduct function returns nothing and takes no parameter inputs, but makes some function calls and takes user input. We create some tests for different variations of these and assert that the correct function calls and number of function calls are made with the use of fixtures.

The inputs we receive and their variations are the following:

* login\_info = login() function call
  + {"username": entry["username"], "wallet": entry["wallet"] } for a successful login.
  + None for an unsuccessful login.
* search = input("Search for products in inventory (type all for whole inventory):") user input
  + display\_csv\_as\_table("products.csv") if “all”.
  + display\_filtered\_table("products.csv", search) if else.
* check = input("Ready to shop? (Y/N)") user input
  + checkoutAndPayment(login\_info) if “y”.
  + search = input("Search for products in inventory (type all for whole inventory):") if else.

Since there is no documentation we do not know if there is any other expected behavior, so we just examine the function’s behavior based on the inputs it is receiving. To check this, we create fixtures/stubs that mimic the possible outcomes. We make sure that we have at least one test case that covers every one of the outcomes stated above.

To see the different test cases, their expected outcomes and the results, see the document “searchAndBuyProduct function testing document”.