**Assessment Sheet (Total time: 1.5 Hrs.)**

* Single line python code to reverse a string? Suggest some unit testing via code
* Write python code to find out if the two string are anagram or not? Suggest some unit testing via code
* Write python code to find out if the two string are palindrome or not? Suggest some unit testing via code
* Give a reason why to use decorators in python? Illustrate it with an example.
* Why do you require pickling? Illustrate it with an example
* Why do we require meta classes in python? Illustrate it with an example
* Differentiate in between multi-threading and multi-processing via python program?
* Give a python code to find out list of URL of all videos on this page: (<https://www.youtube.com/playlist?list=PLib8Q64STW-sMv85WXDmqGR9TT69NlTwC>)
* In a numpy array (arr) from 0 to 50, replace all odd numbers in arr with -1 without changing arr
* Write a python script using pandas that finds and prints: datasets attached:
* top seller n products in given date range (product name & quantity)
* top seller n stores in given date range (store name & quantity)
* top seller n brands in given date range (brand & quantity)
* top seller n cities in given date range (city & quantity)
* On equality, print all the rows.
* Input Data Format

product.csv

* id: identifier of the product
* name: name of the product
* brand: brand of the product

store.csv

* id: identifier of the store
* name: name of the store
* city: city that the store is located in

sales.csv

* product: identifier of the product (id column in product.csv)
* store: identifier of the product (id column in product.csv)
* date: date of sale
* quantity: sales quantity of the specified product in the specified store

Arguments

Your script should take following arguments from command line:

* "--min-date": start of the date range. type:str, format:"YYYY-MM-DD", default:"2020-01-01"
* "--max-date": end of the date range. type:str, format:"YYYY-MM-DD", default:"2020-06-30"
* "--top": number of rows in the output. type:int, default:3

Expected command and output:

$ python3 solution.py --min-date 2020-02-01 --max-date 2020-06-30 --top 2

-- top seller product --

name quantity

p-103 33

p-102 24

p-110 24

-- top seller store --

name quantity

s-3 42

s-2 36

s-7 36

-- top seller brand --

brand quantity

yoyodyne 100

acme 65

-- top seller city --

city quantity

gotham 108

coruscant 78