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Assignment C1

Software Setup for CS4DS

**Answer to the question no. 1**

Clone the project from <https://github.com/sgra64/C1_order_system.git> and setup the project on my local pyCharm environment. After solving all the question I uploaded the code on my github repository [github.com](https://github.com/AhmedDiderRahat/csfb-wise2122/tree/main/assignment_3).

**Answer to the question no. 2**

There are three dataset in the codebase. They are Coustomer, stock, and orders dataset.

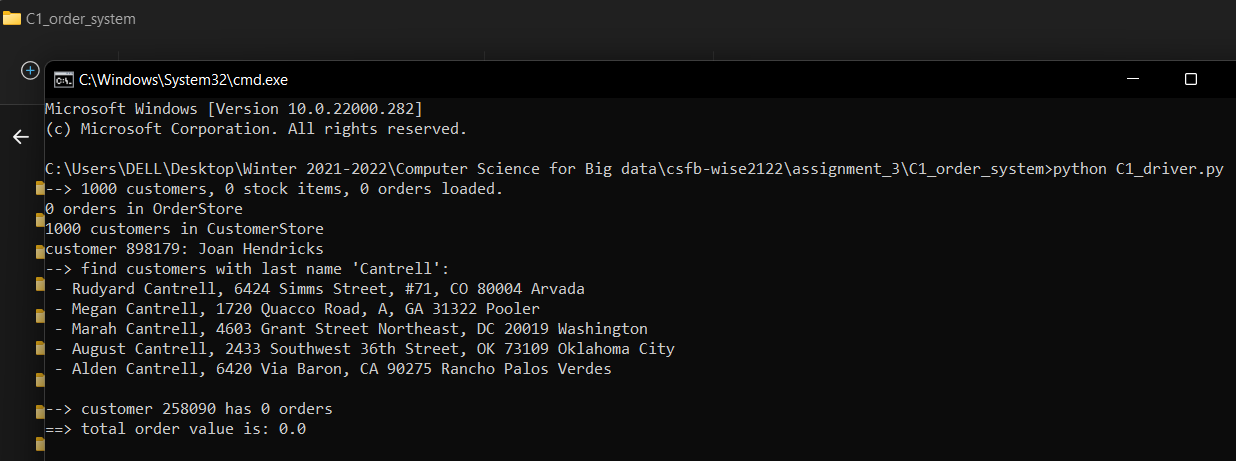
1. **Customer Dataset:** Its contains a list of customer data. Each element of the list is a tuple which contains customer\_id, name, address, and phone. Customer\_id is act as a primary key of each element.
2. **Stock Dataset:** Its contains a list of stock data. Each element of the list is a tuple which contains stock\_id, description, unit price, units\_in\_stock, and product category. Stock\_id is the primary key of this dataset.
3. **Order Dataset:** This contains the order data of the system. Each elements of the list contains a tuple and each tuple defined a single order. An order contains order\_id, customer\_id, stock\_id, units\_ordered, and description. Order\_id the unique identifier of the dataset and customer\_id and stock\_id are represent the foreign key of customer dataset and stock dataset respectively.

**Answer to the question no. 3**

1. As this project is based on singleton principle. So, the objects are exist whenever the DataSore remains loaded. Because the instance will not become eligible for garbage collection until the class 'DataStore' remains loaded.
2. No global reference variable was used for DataFactory because it is imported and implemented as chainable functionalitiy.
3. DataFactory’s import functions enables all the initializations of data from data model.

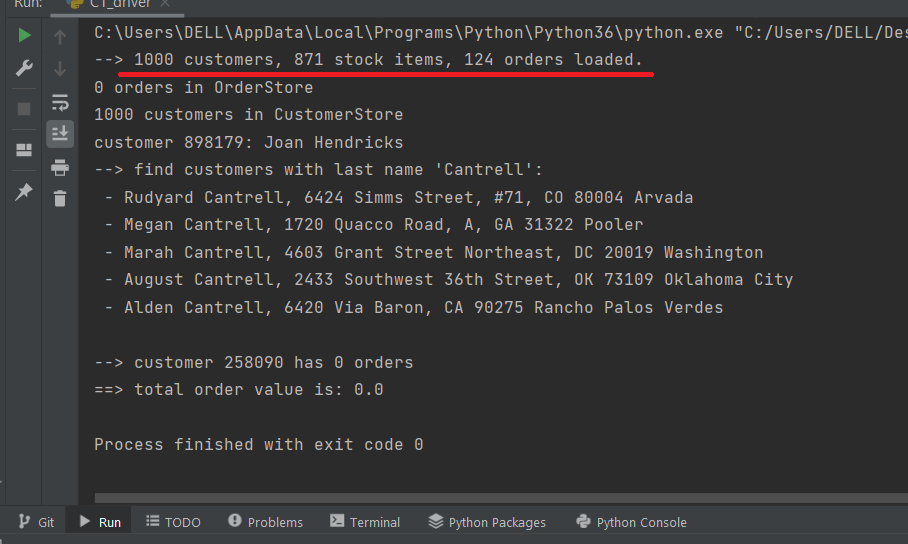
**Answer to the question no. 4**

I have run the code in terminal and it is running without any bug. The screen short is given bellow:

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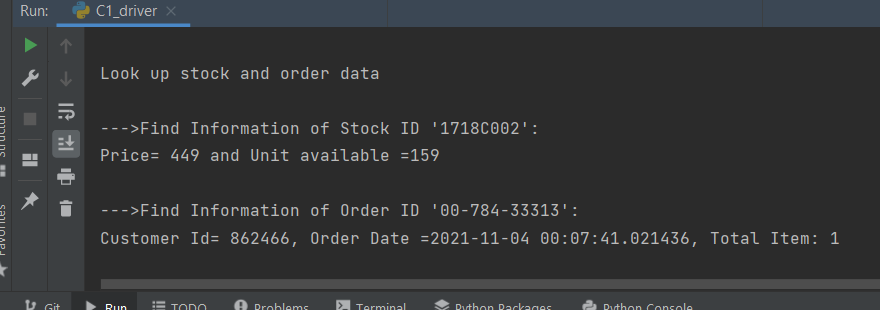
**Answer to the question no. 5**

I have completed all the necessary code segments for question number 5 and then run the code. The output screen-short are given bellow:

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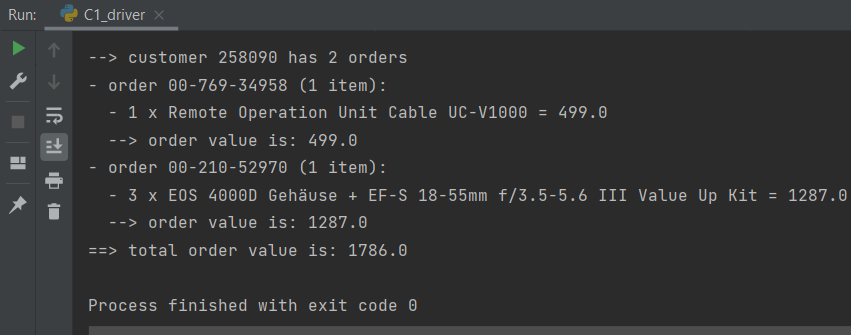
**Answer to the question no. 6**

I have completed the implementation of Order.py and Customer.py class. After successfully running the code I got the following results.



**Answer to the question no. 7**

I have completed the implementation of print\_orders, and print\_order\_items. After successfully run the code I found the following output:



**Answer to the question no. 8**

I have uncommented all the print satements and run the code. Aftre the successful run the:

