# Faculty of Engineering & Technology

# Electrical & Computer Engineering Department

# LINUX LAB

# Python Project

# Report

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**Section**:       2

**Date**:          09.09.2023

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**Starting program:**

```
------------------------------------------------------------------------------
                        WELCOME TO E-COMMERCE STORE
------------------------------------------------------------------------------
LOG IN
Please enter your ID to determine the Permission that you have: 120043
------------------------------------------------------------------------------
                          WELCOME Salwa Fayyad :)
------------------------------------------------------------------------------

             E-COMMERCE STORE MENU
1. Add product (admin-only)
2. Place an item on sale (admin-only)
3. Update product (admin-only)
4. Add a new user (admin-only)
5. Update user (admin-only)
6. Display all users (admin-only)
7. List products (admin and shopper)
8. List shoppers (admin)
9. Execute order (admin-only)
10. Save products to a file (admin-only)
11. Save users to a text file (admin-only)
12. Exit
------------------------------------------------------------------------------
```

**System launch - load Users from a text file**

After loading the users from users.txt file, the user list was:

```
------------------------------------------------------------------------------
                              USERS LIST
------------------------------------------------------------------------------
['030707', 'Ahmad Hussam', '2022-01-19', 'shopper', '1', '{129050:11,129030:3,129060:2}', '1']
['022503', 'Fatima Abdelrahman', '2022-07-05', 'admin', '3']
['040712', 'Youssef Al-Mansoori', '2022-03-12', 'shopper', '2', '{129060:5,129010:2}', '0']
['091505', 'Amina Mohamed', '2022-09-08', 'admin', '1']
['112309', 'Salim Hamoudi', '2022-06-15', 'shopper', '4', '{129060:9,129020:1}', '0']
['032614', 'Noura Al-Saeed', '2022-02-20', 'admin', '2']
['071802', 'Khaled Ibrahim', '2022-04-10', 'shopper', '3', '{}', '0']
['051204', 'Layla Hassan', '2022-11-03', 'admin', '1']
['121411', 'Moussa Al-Darwish', '2022-05-17', 'shopper', '5', '{129050:9,129060:4}', '1']
['030708', 'Rana Mahmoud', '2022-08-22', 'admin', '2']
['120090', 'sondos', '2002-08-19', 'admin', '1']
['120043', 'Salwa Fayyad', '2003-01-19', 'admin', '1']
------------------------------------------------------------------------------
```

**System launch - load products from a text file**

```
------------------------------------------------------------------------------
                             PRODUCTS LIST
------------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129020', 'Rose Perfume', 'Beauty', '50', '150', 'FragranceCo', '1', '39', '2023-03-18']
['129030', 'Running Shoes', 'Shoes', '90', '10', 'FootwearInc', '1', '75', '2023-04-25']
['129040', 'Banana Smoothie', 'Smoothie', '4', '200', 'SmoothieCo', '1', '2', '2023-01-21']
['129010', 'Strawberry Yogurt', 'Dairy', '3', '110', 'DairyCo', '0', '0', '0-0-0']
['129060', 'Smartphone', 'Electronics', '600', '50', 'TechGadget', '1', '559', '2023-05-10']
['129070', 'Chocolate Bars', 'Snacks', '2', '500', 'SnackCo', '0', '0', '0-0-0']
['129080', 'Blue Jeans', 'Clothes', '40', '200', 'FashionCo', '0', '0', '0-0-0']
['129090', 'Apple Juice Bottles', 'Juice', '2.5', '300', 'JuiceComp', '0', '0', '0-0-0']
['129100', 'Leather Sofa', 'Furniture', '799.99', '30', 'HomeComfort', '0', '0', '0-0-0']
------------------------------------------------------------------------------
```

**System launch - validate user id and print access denied messages**
After choosing add new user by the admin :

```
1. Add product (admin-only)
2. Place an item on sale (admin-only)
3. Update product (admin-only)
4. Add a new user (admin-only)
5. Update user (admin-only)
6. Display all users (admin-only)
7. List products (admin and shopper)
8. List shoppers (admin)
9. Execute order (admin-only)
10. Save products to a file (admin-only)
11. Save users to a text file (admin-only)
12. Exit
--------------------------------------------------------------------------
Choose from [1-12] : 4
User ID (Please enter the number contain 6 digits) ): 120043
The ID number already exists. Please choose another ID.
Enter Valid User ID [from 6 digits]
User ID (Please enter the number contain 6 digits) ): 123
Enter Valid User ID [from 6 digits]
User ID (Please enter the number contain 6 digits) ): 123456
1] ADD ADMIN
2] ADD SHOPPER
2
USER NAME: Test
Enter a date (YYYY-MM-DD): 2003-01-19
User input date: 2003-01-19
User created successfully.
```

Be notice that the valid ID number must be 6 digits and not in users list.

Then loading users list to check if the user added:

```
--------------------------------------------------------------------------
Shoppers List
['030707', 'Ahmad Hussam', '2022-01-19', 'shopper', '1', '{129050:11,129030:3,129060:2}', '1']
['040712', 'Youssef Al-Mansoori', '2022-03-12', 'shopper', '2', '{129060:5,129010:2}', '0']
['112309', 'Salim Hamoudi', '2022-06-15', 'shopper', '4', '{129060:9,129020:1}', '0']
['071802', 'Khaled Ibrahim', '2022-04-10', 'shopper', '3', '{}', '0']
['121411', 'Moussa Al-Darwish', '2022-05-17', 'shopper', '5', '{129050:9,129060:4}', '1']
['123456', 'Test', '2003-01-19', 'shopper', 1, {}, 0]
--------------------------------------------------------------------------
```

Notice that the shopper added successfully and the basket is empty.

**Add product**
After choosing adding new product, notice that product id must be 6 digits and not in product list:

```
--------------------------------------------------------------------------
Choose from [1-12] : 1
Product_id: 123
Enter Valid product ID [from 6 digits]
Product_id: 129050
The product ID number already exists. Please choose another product ID.
Enter Valid product ID [from 6 digits]
Product_id: 123444
Product_name: Samsung fridge
Product_category: FRIDGE
Price: 4500
Inventory: 50
Supplier: Electronics
Has_on_offer(enter 1 if the product on sale or 0 otherwise): 0
Product Added successfully.
```

After list the product list:

```
-----------------------------------------------------------------------------
                              PRODUCTS LIST
-----------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129020', 'Rose Perfume', 'Beauty', '50', '150', 'FragranceCo', '1', '39', '2023-03-18']
['129030', 'Running Shoes', 'Shoes', '90', '10', 'FootwearInc', '1', '75', '2023-04-25']
['129040', 'Banana Smoothie', 'Smoothie', '4', '200', 'SmoothieCo', '1', '2', '2023-01-21']
['129010', 'Strawberry Yogurt', 'Dairy', '3', '110', 'DairyCo', '0', '0', '0-0-0']
['129060', 'Smartphone', 'Electronics', '600', '50', 'TechGadget', '1', '559', '2023-05-10']
['129070', 'Chocolate Bars', 'Snacks', '2', '500', 'SnackCo', '0', '0', '0-0-0']
['129080', 'Blue Jeans', 'Clothes', '40', '200', 'FashionCo', '0', '0', '0-0-0']
['129090', 'Apple Juice Bottles', 'Juice', '2.5', '300', 'JuiceComp', '0', '0', '0-0-0']
['129100', 'Leather Sofa', 'Furniture', '799.99', '30', 'HomeComfort', '0', '0', '0-0-0']
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', '0', 0, '0-0-0']
-----------------------------------------------------------------------------
```

**Place an item on sale:**

```
               E-COMMERCE STORE MENU
 1. Add product (admin-only)
 2. Place an item on sale (admin-only)
 3. Update product (admin-only)
 4. Add a new user (admin-only)
 5. Update user (admin-only)
 6. Display all users (admin-only)
 7. List products (admin and shopper)
 8. List shoppers (admin)
 9. Execute order (admin-only)
 10. Save products to a file (admin-only)
 11. Save users to a text file (admin-only)
 12. Exit
---------------------------------------------------------------
Choose from [1-12] : 2
Product ID: 123444
ID found the product is Samsung fridge

Enter Offer Price: 4250
Enter a date (YYYY-MM-DD): 2023-09-30
User input date: 2023-09-30
After update:
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', 1, 4250, '2023-09-30']
```

**Update user:**

```
Choose from [1-12] : 5
Enter user ID you want update 123456
['123456', 'Test', '2003-01-19', 'shopper', '1', '{}', '0']
Test 2003-01-19 shopper 1 {} 0
What fieled you want update:
1]User Name
2]User Date Of Birth
3]User Role
4]User Active
5]User Order
6]EXIT
3
USER ROLE : admin
What fieled you want update:
1]User Name
2]User Date Of Birth
3]User Role
4]User Active
5]EXIT
2
Enter a date (YYYY-MM-DD): 2003-01-20
User input date: 2003-01-20
```

After updating the user name, role and the birth of date of the user. Then listing the users list :

```
------------------------------------------------------------------------------------
                                    USERS LIST
------------------------------------------------------------------------------------
['030707', 'Ahmad Hussam', '2022-01-19', 'shopper', '1', '{129050:11,129030:3,129060:2}', '1']
['022503', 'Fatima Abdelrahman', '2022-07-05', 'admin', '3']
['040712', 'Youssef Al-Mansoori', '2022-03-12', 'shopper', '2', '{129060:5,129010:2}', '0']
['091505', 'Amina Mohamed', '2022-09-08', 'admin', '1']
['112309', 'Salim Hamoudi', '2022-06-15', 'shopper', '4', '{129060:9,129020:1}', '0']
['032614', 'Noura Al-Saeed', '2022-02-20', 'admin', '2']
['071802', 'Khaled Ibrahim', '2022-04-10', 'shopper', '3', '{}', '0']
['051204', 'Layla Hassan', '2022-11-03', 'admin', '1']
['121411', 'Moussa Al-Darwish', '2022-05-17', 'shopper', '5', '{129050:9,129060:4}', '1']
['030708', 'Rana Mahmoud', '2022-08-22', 'admin', '2']
['120090', 'sondos', '2002-08-19', 'admin', '1']
['120043', 'Salwa Fayyad', '2003-01-19', 'admin', '1']
['123456', 'update test', '2003-01-20', 'admin', '1', '{}', '0']
------------------------------------------------------------------------------------
```

Then checking the order validity update for the (shopper) user.

```
------------------------------------------------------------------------------------
Choose from [1-12] : 5
Enter user ID you want update 071802
['071802', 'Khaled Ibrahim', '2022-04-10', 'shopper', '3', '{}', '0']
Khaled Ibrahim 2022-04-10 shopper 3 {} 0
What fieled you want update:
1]User Name
2]User Date Of Birth
3]User Role
4]User Active
5]User Order
6]EXIT
5
Order Finished (1) Not Yet (0) : 1
Shopper's basket is empty ... No order has !!!
```

We notice that '071802' user has empty basket so he can't make an order.

**Products list**
**All products list:**

```
------------------------------------------------------------------------------------
                                   PRODUCTS LIST
------------------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129020', 'Rose Perfume', 'Beauty', '50', '150', 'FragranceCo', '1', '39', '2023-03-18']
['129030', 'Running Shoes', 'Shoes', '90', '10', 'FootwearInc', '1', '75', '2023-04-25']
['129040', 'Banana Smoothie', 'Smoothie', '4', '200', 'SmoothieCo', '1', '2', '2023-01-21']
['129010', 'Strawberry Yogurt', 'Dairy', '3', '110', 'DairyCo', '0', '0', '0-0-0']
['129060', 'Smartphone', 'Electronics', '600', '50', 'TechGadget', '1', '559', '2023-05-10']
['129070', 'Chocolate Bars', 'Snacks', '2', '500', 'SnackCo', '0', '0', '0-0-0']
['129080', 'Blue Jeans', 'Clothes', '40', '200', 'FashionCo', '0', '0', '0-0-0']
['129090', 'Apple Juice Bottles', 'Juice', '2.5', '300', 'JuiceComp', '0', '0', '0-0-0']
['129100', 'Leather Sofa', 'Furniture', '799.99', '30', 'HomeComfort', '0', '0', '0-0-0']
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', '1', '4250', '2023-09-30']
['129150', 'Apple Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129250', 'Banana Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
------------------------------------------------------------------------------------
```

**Product's Offer lists:**

```
                    PRODUCTS IN OFFER LISTS
-------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129020', 'Rose Perfume', 'Beauty', '50', '150', 'FragranceCo', '1', '39', '2023-03-18']
['129030', 'Running Shoes', 'Shoes', '90', '10', 'FootwearInc', '1', '75', '2023-04-25']
['129040', 'Banana Smoothie', 'Smoothie', '4', '200', 'SmoothieCo', '1', '2', '2023-01-21']
['129060', 'Smartphone', 'Electronics', '600', '50', 'TechGadget', '1', '559', '2023-05-10']
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', '1', '4250', '2023-09-30']
['129150', 'Apple Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129250', 'Banana Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
-------------------------------------------------------------------------
```

**Products with Category juice lists:**

```
-------------------------------------------------------------------------
              PRODUCTS WITH CATEGORY: Juice LISTS
-------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129090', 'Apple Juice Bottles', 'Juice', '2.5', '300', 'JuiceComp', '0', '0', '0-0-0']
['129150', 'Apple Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129250', 'Banana Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
-------------------------------------------------------------------------
```

**Products with Samsung fridge lists:**

```
Product with name Samsung fridge List
-------------------------------------------------------------------------
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', '1', '4250', '2023-09-30']
-------------------------------------------------------------------------
```

**Shopper lists:**

**All shopper lists:**

```
-------------------------------------------------------------------------
                        SHOPPER LISTS
-------------------------------------------------------------------------
['030707', 'Ahmad Hussam', '2022-01-19', 'shopper', '1', '{129050:11,129030:3,129060:2}', '1']
['040712', 'Youssef Al-Mansoori', '2022-03-12', 'shopper', '2', '{129060:5,129010:2}', '0']
['112309', 'Salim Hamoudi', '2022-06-15', 'shopper', '4', '{129060:9,129020:1}', '0']
['071802', 'Khaled Ibrahim', '2022-04-10', 'shopper', '3', '{}', '0']
['121411', 'Moussa Al-Darwish', '2022-05-17', 'shopper', '5', '{129050:9,129060:4}', '1']
['123456', 'Test', '2003-01-19', 'shopper', '1', '{}', '0']
-------------------------------------------------------------------------
```

**Shopper with items in the basket lists:**

```
-------------------------------------------------------------------------
              SHOPPER WITH ITEMS IN THE BASKET LISTS
-------------------------------------------------------------------------
['040712', 'Youssef Al-Mansoori', '2022-03-12', 'shopper', '2', '{129060:5,129010:2}', '0']
['112309', 'Salim Hamoudi', '2022-06-15', 'shopper', '4', '{129060:9,129020:1}', '0']
-------------------------------------------------------------------------
```

**All shoppers that have made an order and it is still not processed by the admin**

```
-------------------------------------------------------------------------
       SHOPPERS THAT HAVE MADE AN ORDER AND THE ORDER IS STILL NOT PROCESSED
-------------------------------------------------------------------------
['030707', 'Ahmad Hussam', '2022-01-19', 'shopper', '1', '{129050:11,129030:3,129060:2}', '1']
['121411', 'Moussa Al-Darwish', '2022-05-17', 'shopper', '5', '{129050:9,129060:4}', '1']
-------------------------------------------------------------------------
```

After changing to shopper mode, and add some products to the basket:

```
-----------------------------------------------------------------------------------
                            WELCOME TO E-COMMERCE STORE
-----------------------------------------------------------------------------------
LOG IN
Please enter your ID to determine the Permission that you have: 123456
-----------------------------------------------------------------------------------
                            WELCOME Test :)
-----------------------------------------------------------------------------------

                E-COMMERCE STORE MENU
1. List products (admin and shopper)
2. Add product to the basket (shopper-only)
3. Display basket (shopper-only)
4. Update basket (shopper-only)
5. Place order (shopper-only)
6. Exit


Choose from [1-6] : 2
Enter Product ID: 129030
Enter Number of items: 1
```

```
  Choose from [1-6] : 2
  Enter Product ID: 129060
  Enter Number of items: 1
```

```
  Choose from [1-6] : 2
  Enter Product ID: 123444
  Enter Number of items: 1
```

```
  Enter Product ID: 129080
  Enter Number of items: 2
```

Then display basket:

```
-----------------------------------------------------------------------------------
                            THE BASKET LIST FOR Test
-----------------------------------------------------------------------------------
Product ID =  129030
Product Name =  Running Shoes
Product Category =  Shoes
Price=  90
Inventory =  10
Supplier =  FootwearInc
Has an OFFER =  1
OFFER price =  75
Valid until =  2023-04-25
Number of items =  1
Cost of purchase of the product =  75.0
-----------------------------------------------------------------------------------
Product ID =  129060
Product Name =  Smartphone
Product Category =  Electronics
Price=  600
Inventory =  50
Supplier =  TechGadget
Has an OFFER =  1
OFFER price =  559
Valid until =  2023-05-10
Number of items =  1
Cost of purchase of the product =  559.0
-----------------------------------------------------------------------------------
```

```
------------------------------------------------------------------------------------
Product ID =  123444
Product Name =  Samsung fridge
Product Category =  FRIDGE
Price=  4500
Inventory =  50
Supplier =  Electronics
Has an OFFER =  1
OFFER price =  4250
Valid until =  2023-09-30
Number of items =  1
Cost of purchase of the product =  4250.0
------------------------------------------------------------------------------------
Product ID =  129080
Product Name =  Blue Jeans
Product Category =  Clothes
Price=  40
Inventory =  200
Supplier =  FashionCo
Has an OFFER =  0
OFFER price =  0
Valid until =  0-0-0
Number of items =  2
Cost of purchase of the product =  80.0
------------------------------------------------------------------------------------
Basket Cost =  4964.0
------------------------------------------------------------------------------------
```

**Update basket:**

**Update the number of specific product in the basket:**

```
------------------------------------------------------------------------------------
                          WELCOME TO E-COMMERCE STORE
------------------------------------------------------------------------------------
LOG IN
Please enter your ID to determine the Permission that you have: 123456
------------------------------------------------------------------------------------
                          WELCOME Test :)
------------------------------------------------------------------------------------

               E-COMMERCE STORE MENU
1. List products (admin and shopper)
2. Add product to the basket (shopper-only)
3. Display basket (shopper-only)
4. Update basket (shopper-only)
5. Place order (shopper-only)
6. Exit
------------------------------------------------------------------------------------
Choose from [1-6] : 4
------------------------------------------------------------------------------------
Test  {129030: 1, 129060: 1, 123444: 2}
------------------------------------------------------------------------------------
Update your basket:
1] Clear all products
2] Remove specific product
3] Update the number of items in a specific product
3
Write the product key you want to update in your basket: 123444
Number of the product 123444: 1
-->123444 updated to 1 in the basket.
-->Updated basket: {129030: 1, 129060: 1, 123444: 1}
```

**Delete specific item:**

```
--------------------------------------------------------------------------------
Test  {129030: 1, 129060: 1, 123444: 1}
--------------------------------------------------------------------------------
Update your basket:
1] Clear all products
2] Remove specific product
3] Update the number of items in a specific product
2
Write the product key you want to remove from your basket: 129060
129060 Deleted Successfully
-->Updated basket: {129030: 1, 123444: 1}
```

**Clear all the basket:**

```
--------------------------------------------------------------------------------
Test  {129030: 1, 123444: 1}
--------------------------------------------------------------------------------
Update your basket:
1] Clear all products
2] Remove specific product
3] Update the number of items in a specific product
1
BASKET EMPTY
-->Updated basket: {}
```

**Place order then exit to execute the basket by the admin.**

```
Enter valid number from [1-6]

            E-COMMERCE STORE MENU
1. List products (admin and shopper)
2. Add product to the basket (shopper-only)
3. Display basket (shopper-only)
4. Update basket (shopper-only)
5. Place order (shopper-only)
6. Exit
--------------------------------------------------------------------------------
Choose from [1-6] : 5
----------------------------------------
Order Placed
----------------------------------------
Enter valid number from [1-6]

            E-COMMERCE STORE MENU
1. List products (admin and shopper)
2. Add product to the basket (shopper-only)
3. Display basket (shopper-only)
4. Update basket (shopper-only)
5. Place order (shopper-only)
6. Exit
--------------------------------------------------------------------------------
Choose from [1-6] : 6
Users successfully saved
----------------------------------------------------
```

**Execute order**

In this method the order for the shopper executed by the admin and checking if the product enough by checking the inventory for each product.

First, be notice that the product list before executing the shopper's order:

```
----------------------------------------------------------------------------------------------
                                     PRODUCTS LIST
----------------------------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129020', 'Rose Perfume', 'Beauty', '50', '150', 'FragranceCo', '1', '39', '2023-03-18']
['129030', 'Running Shoes', 'Shoes', '90', '10', 'FootwearInc', '1', '75', '2023-04-25']
['129040', 'Banana Smoothie', 'Smoothie', '4', '200', 'SmoothieCo', '1', '2', '2023-01-21']
['129010', 'Strawberry Yogurt', 'Dairy', '3', '110', 'DairyCo', '0', '0', '0-0-0']
['129060', 'Smartphone', 'Electronics', '600', '50', 'TechGadget', '1', '559', '2023-05-10']
['129070', 'Chocolate Bars', 'Snacks', '2', '500', 'SnackCo', '0', '0', '0-0-0']
['129080', 'Blue Jeans', 'Clothes', '40', '200', 'FashionCo', '0', '0', '0-0-0']
['129090', 'Apple Juice Bottles', 'Juice', '2.5', '300', 'JuiceComp', '0', '0', '0-0-0']
['129100', 'Leather Sofa', 'Furniture', '799.99', '30', 'HomeComfort', '0', '0', '0-0-0']
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', '1', '4250', '2023-09-30']
['129150', 'Apple Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129250', 'Banana Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
----------------------------------------------------------------------------------------------
```

After executing:

```
----------------------------------------------------------------------------------------------
Choose from [1-12] : 9
Enter Shopper ID you want to Execute: 030707
----------------------------------------------------------------------------------------------
129050 : 11
----------------------------------------------------------------------------------------------
Order for 6 of Orange Jucie (129050) is successful.
Insufficient stock for Orange Jucie (129050). Order not processed.
----------------------------------------------------------------------------------------------
129030 : 3
----------------------------------------------------------------------------------------------
Order for 3 of Running Shoes (129030) is successful.
----------------------------------------------------------------------------------------------
129060 : 2
----------------------------------------------------------------------------------------------
Order for 2 of Smartphone (129060) is successful.
Order Executed Successfully
```

Then be notice that the products decreased by the number of items in the shopper's order:

```
----------------------------------------------------------------------------------------------
                                     PRODUCTS LIST
----------------------------------------------------------------------------------------------
['129050', 'Orange Jucie', 'Juice', '3', 0, 'JuiceComp', '1', '1', '2023-01-20']
['129020', 'Rose Perfume', 'Beauty', '50', '150', 'FragranceCo', '1', '39', '2023-03-18']
['129030', 'Running Shoes', 'Shoes', '90', 7, 'FootwearInc', '1', '75', '2023-04-25']
['129040', 'Banana Smoothie', 'Smoothie', '4', '200', 'SmoothieCo', '1', '2', '2023-01-21']
['129010', 'Strawberry Yogurt', 'Dairy', '3', '110', 'DairyCo', '0', '0', '0-0-0']
['129060', 'Smartphone', 'Electronics', '600', 48, 'TechGadget', '1', '559', '2023-05-10']
['129070', 'Chocolate Bars', 'Snacks', '2', '500', 'SnackCo', '0', '0', '0-0-0']
['129080', 'Blue Jeans', 'Clothes', '40', '200', 'FashionCo', '0', '0', '0-0-0']
['129090', 'Apple Juice Bottles', 'Juice', '2.5', '300', 'JuiceComp', '0', '0', '0-0-0']
['129100', 'Leather Sofa', 'Furniture', '799.99', '30', 'HomeComfort', '0', '0', '0-0-0']
['123444', 'Samsung fridge', 'FRIDGE', '4500', '50', 'Electronics', 1, 4350, '2023-10-10']
['129150', 'Apple Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
['129250', 'Banana Jucie', 'Juice', '3', '6', 'JuiceComp', '1', '1', '2023-01-20']
----------------------------------------------------------------------------------------------
```

**Save Product and users by admin before terminating:**

---> if the admin want both users and products save into specific files:

```
---------------------------------------------------------------------------------
Choose from [1-12] : 12
Do you want save files before terminating? (Y,N)y
Save User (u) Save Products (p) Save both (b)b
Enter the filename to save the products (filename.txt)-->new_product.txt
Products successfully saved
Enter the filename to save the users (filename.txt)-->new_users.txt
Users successfully saved
------------------------------------------------------------
```

Files:

```
new_users.txt
1    030707;Ahmad Hussam;2022-01-19;shopper;1;{129050:11,129030:3,129060:2};1
2    022503;Fatima Abdelrahman;2022-07-05;admin;3
3    040712;Youssef Al-Mansoori;2022-03-12;shopper;2;{129060:5,129010:2};0
4    091505;Amina Mohamed;2022-09-08;admin;1
5    112309;Salim Hamoudi;2022-06-15;shopper;4;{129060:9,129020:1};0
6    032614;Noura Al-Saeed;2022-02-20;admin;2
7    071802;Khaled Ibrahim;2022-04-10;shopper;3;{};0
8    051204;Layla Hassan;2022-11-03;admin;1
9    121411;Moussa Al-Darwish;2022-05-17;shopper;5;{129050:9,129060:4};1
10   030708;Rana Mahmoud;2022-08-22;admin;2
11   120090;sondos;2002-08-19;admin;1
12   120043;Salwa Fayyad;2003-01-19;admin;1
13   123456;Test;2003-01-19;shopper;1;{};1
```

```
new_product.txt
1    129050;Orange Jucie;Juice;3;6;JuiceComp;1;1;2023-01-20
2    129020;Rose Perfume;Beauty;50;150;FragranceCo;1;39;2023-03-18
3    129030;Running Shoes;Shoes;90;10;FootwearInc;1;75;2023-04-25
4    129040;Banana Smoothie;Smoothie;4;200;SmoothieCo;1;2;2023-01-21
5    129010;Strawberry Yogurt;Dairy;3;110;DairyCo;0;0;0-0-0
6    129060;Smartphone;Electronics;600;50;TechGadget;1;559;2023-05-10
7    129070;Chocolate Bars;Snacks;2;500;SnackCo;0;0;0-0-0
8    129080;Blue Jeans;Clothes;40;200;FashionCo;0;0;0-0-0
9    129090;Apple Juice Bottles;Juice;2.5;300;JuiceComp;0;0;0-0-0
10   129100;Leather Sofa;Furniture;799.99;30;HomeComfort;0;0;0-0-0
11   123444;Samsung fridge;FRIDGE;4500;50;Electronics;1;4250;2023-09-30
12   129150;Apple Jucie;Juice;3;6;JuiceComp;1;1;2023-01-20
13   129250;Banana Jucie;Juice;3;6;JuiceComp;1;1;2023-01-20
```

**Save basket's shopper into file**

If the user is shopper and want to exit from the program, then ask the shopper if want

save the basket information into {user_id)_basket.txt:

```
----------------------------------------------------------------------------------------
                E-COMMERCE STORE MENU                                                    ⬚
1. List products (admin and shopper)
2. Add product to the basket (shopper-only)
3. Display basket (shopper-only)
4. Update basket (shopper-only)
5. Place order (shopper-only)
6. Exit
----------------------------------------------------------------------------------------
Choose from [1-6] : 6
Do you want save Your basket before terminating? (y,n)-->y
--> 030707_Basket.txt Successfully save
----------------------------------------------------------------------------------------
                THANK YOU FOR SHOPPING
----------------------------------------------------------------------------------------
```

030707_Basket.txt:

```
----------------------------------------------------------------------------------------
                            THE BASKET LIST FOR Ahmad Hussam
----------------------------------------------------------------------------------------
Product ID = 129050
Product Name = Orange Jucie
Product Category = Juice
Price = 3
Inventory = 6
Supplier = JuiceComp
Has an OFFER = 1
OFFER price = 1
Valid until = 2023-01-20
Number of items = 11
Cost of purchase of the product = 11.0
----------------------------------------------------------------------------------------
Product ID = 129030
Product Name = Running Shoes
Product Category = Shoes
Price = 90
Inventory = 10
Supplier = FootwearInc
Has an OFFER = 1
OFFER price = 75
Valid until = 2023-04-25
Number of items = 3
Cost of purchase of the product = 225.0
----------------------------------------------------------------------------------------
Product ID = 129060
Product Name = Smartphone
Product Category = Electronics
Price = 600
Inventory = 50
Supplier = TechGadget
Has an OFFER = 1
OFFER price = 559
Valid until = 2023-05-10
Number of items = 2
Cost of purchase of the product = 1118.0
----------------------------------------------------------------------------------------
Basket Cost = 1354.0
----------------------------------------------------------------------------------------
                            THANK YOU FOR SHOPPING
----------------------------------------------------------------------------------------
```