supermarket management system

A file called **"itemsInfo.txt"** was opened and the supermarket data was uploaded to it in the form of a dictionary so that the dictionary contains **[Serial Number , Item Name , price , number of available items in the supermarket , number of sold items]**
Where Serial Number represents the keys of dictionary and represents
{ Item Name, price, number of available items in the supermarket , number of sold} values in the dictionary and in the form of a list .
When you open the program, a list will appear containing the activities that the user can perform inside the supermarket and appear like this :

```
Supermarket Management System
================================
  1. Print items info
  2. Search for an item
  3. Add new item
  4. Remove an item
  5. Sell an item
  6. Update an item
  7. Exit
================================
```

When the user chooses the number 1 :

The program will call the print_items() function, which prints the items in the supermarket in the form of a table showing the serial number of the product, the name of the product, its price, the available items and the number of items sold .

```
Enter your choice:1
SN        Item Name          Price      Available Items      Sold Items
1000      Apple               3.5                   11               0
1234      Orange              4.75                   7               0
4321      Bread               1.15                   4               0
```

When the user chooses the number 2 :

The program will call the searchitem() function, which helps the user to search for the product through the name of the product or through its serial number.
When clicking on the search option Item Name, the user enters the name of the product or part of it, and the program prints all the information about this product

```
Enter your choice:2
1. By Serial Number
2. By Item Name
Enter your choice:2
Enter item name or part of it:e
SN       Item Name             Price      Available Items        Sold Items
1000     Apple                   3.5                  11                  0
1234     Orange                 4.75                   7                  0
4321     Bread                  1.15                   4                  0
```

When clicking on the search option using the serial number, the user writes the serial number of the product and the program prints the product data

```
Enter your choice:2
1. By Serial Number
2. By Item Name
Enter your choice:1
Enter serial number of the item:1000
SN       Item Name             Price      Available Items        Sold Items
1000     Apple                   3.5                  11                  0
```

When the user chooses the number 3 :

The program calls the add_item() function, which helps the user to add a new product to the list of products in the supermarket
It asks the user to enter the serial number of the product, the name of the product and the number of items available in it .

```
Enter your choice : 3
Enter item SN: 1000
Serial Number already exists
Enter item SN: 1002
Enter item name:
Item name cannot be empty
Enter item name: mango
Enter item price: 20
Enter number of available items: 30
Item has been added successfully !!!
```

When the user chooses the number 4 :

The program calls the remove_item() function, where the user enters the serial number of the product to be deleted from the file that contains the supermarket products.

```
Enter your choice:4
Enter serial number of the item: 1003
Item does not exist
```

```
Enter your choice:4
Enter serial number of the item: 1000
SN      Item Name             Price       Available Items         Sold Items
1000    Apple                 3.5              11                      0
Are you sure you want to remove this item ? [Y/N]Y
Item has been removed successfully :)
```

When the user chooses the number 5 :

The program calls the sell_item() function to sell the product, where it enters the serial number of the product that it will sell, and also enters the name of the buyer, and then they are placed in a file so that this file contains the name of the buyer and the serial number of the product that he sold.

```
Enter your choice : 5
Enter serial number of the item: 1000
Enter the name of the person who bought this item: ahmed
Item has been sold to ahmed Successfully
```

A file named "soldItems.txt" is created in which the name of the buyer and the product sold is placed.

```
1000,ahmed
```

When the user chooses the number 6 :

The program calls the Update_an_item() function, where the program updates the name of the product or the number of items available from the product by entering the serial number of the product, then the new value of the product is entered and updated inside the file.

```
Enter your choice:6
Enter serial number of the item: 1005
Item does not exist
```

```
Enter your choice:6
Enter serial number of the item: 1000
1. Name
 2. Available Items
What would you like to update ?1
Enter the new available name of items: mango
Item has been updated successfully :)
```

```
Enter your choice:6
Enter serial number of the item: 1000
1. Name
 2. Available Items
What would you like to update ?2
Enter the new available number of items: 9
Item has been updated successfully :)
```

When the user chooses the number 7 :

The program stops the program and downloads the dictionary in the file .

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