#MAJOR PROJECT 1: INVENTORY MANAGEMENT

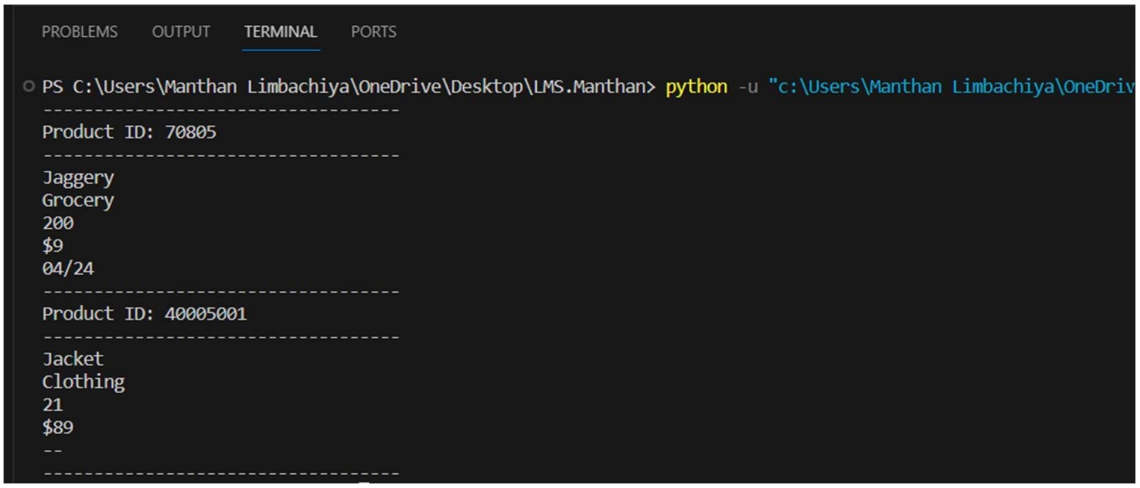
1. Creating and displaying the product inventory:

Python Program:

inventory_management.py > ...

```python
# MAKING PRODUCTS INVENTORY
product = {70805 : {'product_name'   : 'Jaggery',
                    'product_cat'    : 'Grocery',
                    'qnt_in_stock'   : '200',
                    'price_per_unit' :'$9',
                    'expiry_date'    :'04/24'},

           40005001: {'product_name'  : 'Jacket',
                      'product_cat'   : 'Clothing',
                      'qnt_in_stock'  : '21',
                      'price_per_unit':'$89',
                      'expiry_date'   : '--',  }}

#DISPLAYING CURRENT INVENTORY
print('-'*35)
print("Product ID: 70805 ")
print('-'*35)
print(product[70805]['product_name'])
print(product[70805]['product_cat'])
print(product[70805]['qnt_in_stock'])
print(product[70805]['price_per_unit'])
print(product[70805]['expiry_date'])
print("-"*35)

print("Product ID: 40005001 ")

print('-'*35)
print(product[40005001]['product_name'])
print(product[40005001]['product_cat'])
print(product[40005001]['qnt_in_stock'])
print(product[40005001]['price_per_unit'])
print(product[40005001]['expiry_date'])
print("-"*35)
```

Execution:



2. Searching for a product from Inventory:

Python program:

```
inventory_management.py > ...
35  # SEARCHING FOR DESIRED PRODUCT
36
37  reg_no = int(input("Enter Product Number to Search:"))
38  print('-'*35)
39  print(product[reg_no]['product_name'])
40  print(product[reg_no]['product_cat'])
41  print(product[reg_no]['qnt_in_stock'])
42  print(product[reg_no]['price_per_unit'])
43  print(product[reg_no]['expiry_date'])
44  print("-"*35)
```

Execution:

```
Enter Product Number to Search:70805
Jaggery
Grocery
200
$9
04/24
```

3. Enabling User to add new products in Inventory:

Python Program:

```
45
46  #ENABLING USER TO ADD PRODUCTS INTO INVENTORY
47
48  new_reg_no     = int(input("Enter Product number to add New Product:"))
49  product_name   = str(input("Enter Product Name: "))
50  product_cat    = str(input("Enter Product Category: "))
51  qnt_in_stock   = int(input("Enter Quantity in Stock: "))
52  price_per_unit = "$" + str(input("Enter Price per Unit:"))
53  expiry_date    = str(input("Enter expiry date in (MM/YY) format:"))
54
55  temp = {}
56  temp['product_name']    = product_name
57  temp['product_cat']     = product_cat
58  temp['qnt_in_stock']    = qnt_in_stock
59  temp['price_per_unit'] = price_per_unit
60  temp['expiry_date']     = expiry_date
61
62  product[new_reg_no] = temp
```

```
PROBLEMS  OUTPUT  TERMINAL  PORTS

PS C:\Users\Manthan Limbachiya\OneDrive\Desktop\LMS.Manthan>
```

Execution:

```
-----------------------------------
Enter Product number to add New Product:30909
Enter Product Name: T-shirt
Enter Product Category: Clothing
Enter Quantity in Stock: 45
Enter Price per Unit:69
Enter expiry date in (MM/YY) format:--
```

4. Displaying Updated Inventory:

Python Program:

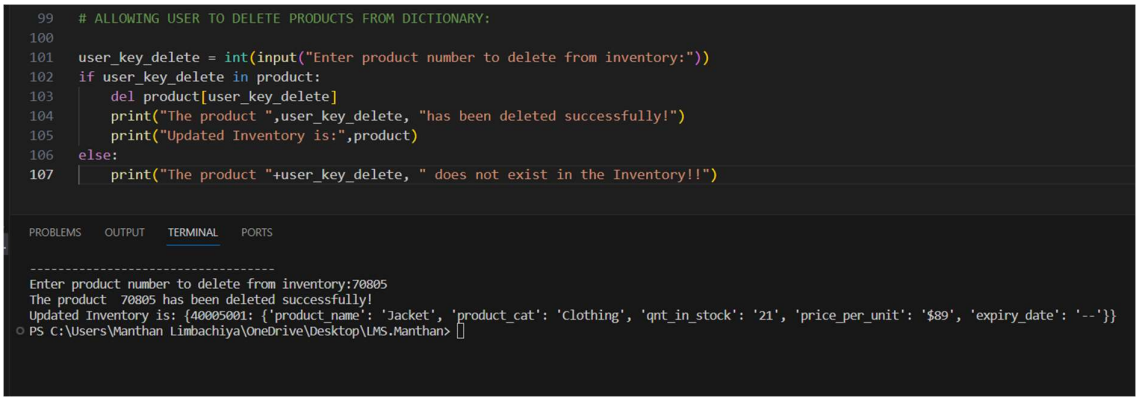
```
inventory_management.py > ...
64  #DISPLAYING UPDATED INVENTORY
65
66  print("-----Updated Products-----")
67  print('-'*35)
68  print("Product ID: 70805 ")
69  print('-'*35)
70  print(product[70805]['product_name'])
71  print(product[70805]['product_cat'])
72  print(product[70805]['qnt_in_stock'])
73  print(product[70805]['price_per_unit'])
74  print(product[70805]['expiry_date'])
75  print("-"*35)
76
77  print("Product ID: 40005001 ")
78
79  print('-'*35)
80  print(product[40005001]['product_name'])
81  print(product[40005001]['product_cat'])
82  print(product[40005001]['qnt_in_stock'])
83  print(product[40005001]['price_per_unit'])
84  print(product[40005001]['expiry_date'])
85  print("-"*35)
86
87  print("Product ID: ", new_reg_no)
88
89  print("-"*35)
90  print(product[new_reg_no]['product_name'])
91  print(product[new_reg_no]['product_cat'])
92  print(product[new_reg_no]['qnt_in_stock'])
93  print(product[new_reg_no]['price_per_unit'])
94  print(product[new_reg_no]['expiry_date'])
95  print("-"*35)
96

PROBLEMS  OUTPUT  TERMINAL  PORTS

PS C:\Users\Manthan Limbachiya\OneDrive\Desktop\LMS.Manthan>
```

Execution:

```
-----Updated Products-----
-----------------------------------
Product ID: 70805
-----------------------------------
Jaggery
Grocery
200
$9
04/24
-----------------------------------
Product ID: 40005001
-----------------------------------
Jacket
Clothing
21
$89
--
-----------------------------------
Product ID:  30909
-----------------------------------
T-shirt
Clothing
45
$69
--
-----------------------------------
PS C:\Users\Manthan Limbachiya\OneDrive\Desktop\LMS.Manthan>
```

5. Allowing user to delete products from Inventory:

Python Code with Execution:



```
# ALLOWING USER TO DELETE PRODUCTS FROM DICTIONARY:

user_key_delete = int(input("Enter product number to delete from inventory:"))
if user_key_delete in product:
    del product[user_key_delete]
    print("The product ",user_key_delete, "has been deleted successfully!")
    print("Updated Inventory is:",product)
else:
    print("The product "+user_key_delete, " does not exist in the Inventory!!")
```

```
PROBLEMS  OUTPUT  TERMINAL  PORTS

----------------------------------
Enter product number to delete from inventory:70805
The product  70805 has been deleted successfully!
Updated Inventory is: {40005001: {'product_name': 'Jacket', 'product_cat': 'Clothing', 'qnt_in_stock': '21', 'price_per_unit': '$89', 'expiry_date': '--'}}
PS C:\Users\Manthan Limbachiya\OneDrive\Desktop\LMS.Manthan>
```

Summary:

This Inventory management system is created using python programming. The program can be ran on any python supported IDE. Firstly the program displays all the products and their details that are already available in the inventory. The program allows user to search the product by entering product number (ID). The program also allows user to add new products into the inventory by adding product details as mentioned above in the report. Once user has provided all the required product details, the program then displays the updated inventory having the new product introduced by the user. User can also delete product details just by entering the product number.

NOTE:

In the project I myself have added 13 more products having different product number. But if I add screenshots of the code having all in total 15 products then the pages of this report would have been increased and hence showcasing the above amount of products only.