	WEEK 5 Project : Inventory Management System :					
In [38]:	<pre>dct = { 'ME101' : {'name': 'coca cola'</pre>		<pre>, 'supplier': 'pepsiCo company' , 'supplier': '7 up company' , 'supplier': 'pepsi company' , 'supplier': 'maa company' , 'supplier': 'arokya company'</pre>	<pre>, 'amount': 'Rs.80' , 'q , 'amount': 'Rs.70' , 'q , 'amount': 'Rs.40' , 'q , 'amount': 'Rs.20' , 'q , 'amount': 'Rs.30' , 'q , 'amount': 'Rs.110', 'q , 'amount': 'Rs.150', 'q</pre>	<pre>ty_on_hand': 71 , 'customer ty_on_hand': 32 , 'customer ty_on_hand': 55 , 'customer ty_on_hand': 220 , 'customer ty_on_hand': 105 , 'customer ty_on_hand': 24 , 'customer</pre>	orders' : 25 , orders' : 59 , orders' : 26 , orders' : 34 ,
In [39]: Out[39]:	<pre>dct {'ME101': {'name': 'coca cola', 'description': 'energy drink', 'supplier': 'cola company', 'amount': 'Rs.50', 'qty_on_hand': 60, 'customer_orders': 38, 'qty_available': 22,</pre>					
	'purchased': 'YES'}, 'ME102': {'name': 'mountain dew', 'description': 'energy drink', 'supplier': 'pepsiCo company', 'amount': 'Rs.80', 'qty_on_hand': 46, 'customer_orders': 25, 'qty_available': 21, 'purchased': 'NO'},					
	'ME103': {'name': '7up', 'description': 'energy drink', 'supplier': '7 up company', 'amount': 'Rs.70', 'qty_on_hand': 71, 'customer_orders': 59, 'qty_available': 12, 'purchased': 'NO'}, 'ME104': {'name': 'pepsi',					
	<pre>'description': 'energy drink', 'supplier': 'pepsi company', 'amount': 'Rs.40', 'qty_on_hand': 32, 'customer_orders': 26, 'qty_available': 6, 'purchased': 'YES'}, 'ME105': {'name': 'maaza', 'description': 'energy drink',</pre>					
	<pre>'supplier': 'maa company', 'amount': 'Rs.20', 'qty_on_hand': 55, 'customer_orders': 34, 'qty_available': 21, 'purchased': 'NO'}, 'ME107': {'name': 'milk', 'description': 'energy drink', 'supplier': 'arokya company',</pre>					
	<pre>'amount': 'Rs.30', 'qty_on_hand': 220, 'customer_orders': 114, 'qty_available': 106, 'purchased': 'YES'}, 'ME108': {'name': 'sprite', 'description': 'energy drink', 'supplier': 'sprite company', 'amount': 'Rs.110',</pre>					
	<pre>'qty_on_hand': 105, 'customer_orders': 90, 'qty_available': 19, 'purchased': 'YES'}, 'ME109': {'name': 'red bull', 'description': 'energy drink', 'supplier': 'red bull company', 'amount': 'Rs.150', 'qty_on_hand': 24,</pre>					
	<pre>'customer_orders': 15, 'qty_available': 29, 'purchased': 'NO'}, 'ME110': {'name': 'fizz', 'description': 'energy drink', 'supplier': 'apple fizz company', 'amount': 'Rs.60 ', 'qty_on_hand': 75, 'customer_orders': 66,</pre>					
In [40]:	<pre>'qty_available': 49, 'purchased': 'NO'}} 1. Add new product in inventory: product_id = input() name = input() description = input() supplier = input()</pre>					
	<pre>amount = input() qty_on_hand = input() customer_orders = input() qty_available = input() purchased = input() temp={} temp['name'] = name temp['description'] = description temp['supplier'] = supplier</pre>					
	<pre>temp['amount'] = amount temp['qty_on_hand'] = qty_on_hand temp['customer_orders'] = customer_orders temp['qty_available'] = qty_available temp['purchased'] = purchased dct[product_id] = temp dct</pre> ME398					
Out[40]:	pulpy orange energy drink orange company Rs.28 3829 3621 178 NO {'ME101': {'name': 'coca cola',					
	<pre>'description': 'energy drink', 'supplier': 'cola company', 'amount': 'Rs.50', 'qty_on_hand': 60, 'customer_orders': 38, 'qty_available': 22, 'purchased': 'YES'}, 'ME102': {'name': 'mountain dew', 'description': 'energy drink',</pre>					
	<pre>'supplier': 'pepsiCo company', 'amount': 'Rs.80', 'qty_on_hand': 46, 'customer_orders': 25, 'qty_available': 21, 'purchased': 'NO'}, 'ME103': {'name': '7up', 'description': 'energy drink', 'supplier': '7 up company', 'amount': 'Rs.70',</pre>					
	'qty_on_hand': 71, 'customer_orders': 59, 'qty_available': 12, 'purchased': 'NO'}, 'ME104': {'name': 'pepsi', 'description': 'energy drink', 'supplier': 'pepsi company', 'amount': 'Rs.40', 'qty_on_hand': 32,					
	<pre>'customer_orders': 26, 'qty_available': 6, 'purchased': 'YES'}, 'ME105': {'name': 'maaza', 'description': 'energy drink', 'supplier': 'maa company', 'amount': 'Rs.20', 'qty_on_hand': 55, 'customer_orders': 34,</pre>					
	<pre>'qty_available': 21, 'purchased': 'NO'}, 'ME107': {'name': 'milk', 'description': 'energy drink', 'supplier': 'arokya company', 'amount': 'Rs.30', 'qty_on_hand': 220, 'customer_orders': 114, 'qty_available': 106, 'purchased': 'YES'},</pre>					
	<pre>'ME108': {'name': 'sprite', 'description': 'energy drink', 'supplier': 'sprite company', 'amount': 'Rs.110', 'qty_on_hand': 105, 'customer_orders': 90, 'qty_available': 19, 'purchased': 'YES'}, 'ME109': {'name': 'red bull',</pre>					
	<pre>'description': 'energy drink', 'supplier': 'red bull company', 'amount': 'Rs.150', 'qty_on_hand': 24, 'customer_orders': 15, 'qty_available': 29, 'purchased': 'NO'}, 'ME110': {'name': 'fizz', 'description': 'energy drink',</pre>					
	<pre>'supplier': 'apple fizz company', 'amount': 'Rs.60 ', 'qty_on_hand': 75, 'customer_orders': 66, 'qty_available': 49, 'purchased': 'NO'}, 'ME398': {'name': 'pulpy orange', 'description': 'energy drink', 'supplier': 'orange company', 'amount': 'Rs.28',</pre>					
In [41]:	'qty_on_hand': '3829', 'customer_orders': '3621', 'qty_available': '178', 'purchased': 'NO'}} 2. Remove Product from Inventory: product_id = str(input())					
Out[41]:	<pre>del dct[product_id] dct ME101 {'ME102': {'name': 'mountain dew', 'description': 'energy drink', 'supplier': 'pepsiCo company', 'amount': 'Rs.80', 'qty_on_hand': 46, 'customer_orders': 25,</pre>					
	'qty_available': 21, 'purchased': 'NO'}, 'ME103': {'name': '7up', 'description': 'energy drink', 'supplier': '7 up company', 'amount': 'Rs.70', 'qty_on_hand': 71, 'customer_orders': 59, 'qty_available': 12,					
	'purchased': 'NO'}, 'ME104': {'name': 'pepsi', 'description': 'energy drink', 'supplier': 'pepsi company', 'amount': 'Rs.40', 'qty_on_hand': 32, 'customer_orders': 26, 'qty_available': 6, 'purchased': 'YES'},					
	<pre>'ME105': {'name': 'maaza', 'description': 'energy drink', 'supplier': 'maa company', 'amount': 'Rs.20', 'qty_on_hand': 55, 'customer_orders': 34, 'qty_available': 21, 'purchased': 'NO'}, 'ME107': {'name': 'milk', 'description': 'energy drink'</pre>					
	<pre>'description': 'energy drink', 'supplier': 'arokya company', 'amount': 'Rs.30', 'qty_on_hand': 220, 'customer_orders': 114, 'qty_available': 106, 'purchased': 'YES'}, 'ME108': {'name': 'sprite', 'description': 'energy drink', 'supplier': 'sprite company',</pre>					
	'amount': 'Rs.110', 'qty_on_hand': 105, 'customer_orders': 90, 'qty_available': 19, 'purchased': 'YES'}, 'ME109': {'name': 'red bull', 'description': 'energy drink', 'supplier': 'red bull company', 'amount': 'Rs.150',					
	<pre>'qty_on_hand': 24, 'customer_orders': 15, 'qty_available': 29, 'purchased': 'NO'}, 'ME110': {'name': 'fizz', 'description': 'energy drink', 'supplier': 'apple fizz company', 'amount': 'Rs.60 ', 'qty_on_hand': 75,</pre>					
	<pre>'customer_orders': 66, 'qty_available': 49, 'purchased': 'NO'}, 'ME398': {'name': 'pulpy orange', 'description': 'energy drink', 'supplier': 'orange company', 'amount': 'Rs.28', 'qty_on_hand': '3829', 'customer_orders': '3621', 'qty_available': '178',</pre>					
In [42]:	<pre>'purchased': 'NO'}} 3,Deduct product from inventory if put temp = {} temp = dct temp for i in dct.copy():</pre>	urchased :				
Out[42]:	<pre>if(dct[i]['purchased'] == 'YES'): del temp[i] temp {'ME102': {'name': 'mountain dew', 'description': 'energy drink', 'supplier': 'pepsiCo company', 'amount': 'Rs.80', 'qty_on_hand': 46, 'customer_orders': 25,</pre>					
	'qty_available': 21, 'purchased': 'NO'}, 'ME103': {'name': '7up', 'description': 'energy drink', 'supplier': '7 up company', 'amount': 'Rs.70', 'qty_on_hand': 71, 'customer_orders': 59, 'qty_available': 12,					
	<pre>'purchased': 'NO'}, 'ME105': {'name': 'maaza', 'description': 'energy drink', 'supplier': 'maa company', 'amount': 'Rs.20', 'qty_on_hand': 55, 'customer_orders': 34, 'qty_available': 21, 'purchased': 'NO'}, 'ME109': {'name': 'red bull',</pre>					
	<pre>'description': 'energy drink', 'supplier': 'red bull company', 'amount': 'Rs.150', 'qty_on_hand': 24, 'customer_orders': 15, 'qty_available': 29, 'purchased': 'NO'}, 'ME110': {'name': 'fizz', 'description': 'energy drink',</pre>					
	<pre>'supplier': 'apple fizz company', 'amount': 'Rs.60 ', 'qty_on_hand': 75, 'customer_orders': 66, 'qty_available': 49, 'purchased': 'NO'}, 'ME398': {'name': 'pulpy orange', 'description': 'energy drink', 'supplier': 'orange company', 'amount': 'Rs.28',</pre>					
In [45]:	<pre>'qty_on_hand': '3829', 'customer_orders': '3621', 'qty_available': '178', 'purchased': 'NO'}} 4, Generate Bill: product_id = input("Enter the product_id</pre>	:")				
	<pre>print('-'*30) print("Product_id:",product_id) print("Product_Name:",dct[product_id]['na print("Description",dct[product_id]['desc print("Supplier:",dct[product_id]['suppli print("Qty_on_hand:",dct[product_id]['qty print("Customer_Orders:",dct[product_id][print("Qty_available:",dct[product_id]['q print("Purchased:",dct[product_id]['purch print('_!*20)</pre>	ription']) er']) on_hand']) 'customer_orders']) ty_available'])				
	print('-'*30) Enter the product_id :ME109					
In [46]: In [47]:	<pre>Qty_available: 29 Purchased: N0 5. Save every bill in a CSV file import pandas as pd df = pd.DataFrame.from_dict(dct)</pre>					
In [47]: In [48]: Out[48]:	df ME102 ME103 name mountain dew 7up	energy drink energy drink energy dri	izz pulpy orange ink energy drink			
	amountRs.80Rs.70qty_on_hand4671customer_orders2559qty_available2112purchasedNONO	34 15 21 29	60 Rs.28 75 3829 66 3621 49 178 NO NO			