```
products = {
                                                                           "expiry": "20 oct 2023
    1001 : {"name": "Pepsi Can",
                                                "price":153,
                                                              "quan":50,
                                                                           "expiry":"12 jan 2022
    1002 : {"name":"Tata Salt",
                                                "price":20,
                                                              "quan":130,
    1003 : {"name":"Tata Tea Gold",
                                                                           "expiry":"10 mar 2023
                                                "price":48,
                                                              "quan":145,
    1004 : {"name":"Turmeric Powder",
                                                              "quan":122, "expiry":"23 jun 2023
                                                "price":52,
    1005 : {"name":"Quaker Oats",
                                                "price":285,
                                                              "quan":30,
                                                                           "expiry": "30 oct 2022
    1006 : {"name":"Saffola Active",
                                                                           "expiry": "29 jan 2022
                                                "price":207,
                                                              "quan":58,
    1007 : {"name":"Kitkat Desert",
                                                "price":55,
                                                              "quan":59,
                                                                           "expiry": "31 aug 2022
    1008 : {"name":"Dark Fantasy Choco Fills", "price":90,
                                                              "quan":90,
                                                                           "expiry": "21 feb 2022
    1009 : {"name":"Candyman Fantasy",
                                                                           "expiry":"28 dec 2021
                                                "price":80,
                                                              "quan":95,
    1010 : {"name":"Lotte Choco Pie",
                                                "price":110,
                                                              "quan":95,
                                                                           "expiry": "01 jun 2022
                                                              "quan":100, "expiry":"15 jul 2022
    1011 : {"name":"Britania Chocolate cake",
                                               "price":120,
                                                                           "expiry":"02 dec 2021
    1012 : {"name":"Pillsbury cookes cake",
                                                              "quan":200,
                                                "price":90,
    1013 : {"name":"Kraft Oreo Soft Cake",
                                                "price":249,
                                                              "quan":120, "expiry":"30 dec 2021
                                                              "quan":180, "expiry":"19 mar 2022
    1014 : {"name": "Mom's Magic Cashew",
                                                "price":80,
    1015 : {"name":"Cadbury Oreo chacolate",
                                                "price":60,
                                                              "quan":185, "expiry":"19 feb 2022
                                                              "quan":190, "expiry":"15 jan 2022
    1016 : {"name":"Betty Croker Pancake",
                                                "price":346,
                                                              "quan":140, "expiry":"13 dec 2011
    1017 : {"name":"Parle G Original",
                                                "price":67,
    1018 : {"name":"Lays Potato Chips",
                                                "price":30,
                                                              "quan":450, "expiry":"14 feb 2023
                                                              "quan":440, "expiry":"20 dec 2023
    1019 : {"name": "Bingo! Mad Angle",
                                                "price":25,
    1020 : {"name":"Kellogg's pringles",
                                                "price":85,
                                                              "quan":400, "expiry":"25 jan 2024
                                                              "quan":360, "expiry":"22 jan 2023
    1021 : {"name": "Dorito's Nacho Chips",
                                                "price":90,
                                                                           "expiry": "20 dec 2024
    1022 : {"name":"Thums Up Soft Drink",
                                                "price":40,
                                                              "quan":60,
                                                                           "expiry":"20 jun 2023
    1023 : {"name": "Svami Soda Water",
                                                "price":55,
                                                              "quan":70,
                                                                           "expiry":"22 jul 2023
    1024 : {"name":"Coca-Cola",
                                                              "quan":60,
                                                "price":65,
    1025 : {"name":"Sprite Lime Flavor",
                                                "price":89,
                                                              "quan":40,
                                                                           "expiry":"20 nov 2023
    1026 : {"name":"Colgate Maxfresh",
                                                                           "expiry": "20 jun 2024
                                                "price":215,
                                                              "quan":55,
    1027 : {"name": "Pepsodent Gum Care",
                                                "price":300,
                                                              "quan":150, "expiry":"15 jul 2022
    1028 : {"name": "Dabur Amla Hair Oil",
                                                "price":247,
                                                              "quan":100, "expiry":"10 aug 2024
                                                                           "expiry": "31 jul 2022
    1029 : {"name":"Nivea Men Face Wash",
                                                "price":149,
                                                              "quan":98,
    1030 : {"name":"Himalaya Herbal Face wash", "price":104,
                                                              "quan":200, "expiry":"22 may 2022
                                                              "quan":150, "expiry":"31 may 2024
    1031 : {"name": "Himalaya Baby Powder",
                                                "price":243,
                                                                          "expiry": "31 may 2024
    1032 : {"name":"Nivea Talcum Powder",
                                                "price":199,
                                                              "quan":120,
    1033 : {"name":"Fogg Xtremo Scent",
                                                "price":299,
                                                              "quan":155, "expiry":"01 jan 2024
                                                "price":555,
                                                              "quan":230, "expiry":"31 may 2024
    1034 : {"name":"Villain Perfume men",
    1035 : {"name":"Dairy Milk Silk",
                                                "price":475,
                                                              "quan":50,
                                                                           "expiry":"31 jan 2022
}
import json
js=json.dumps(products)
fd=open("products.json","w")
fd.write(js)
fd.close()
fd = open("products.json",'r')
```

```
06/09/2021, 20:22
   r = та.reaa()
   fd.close()
   products = json.loads(r)
   products
           'expiry': '23 jun 2023',
           'name': 'Turmeric Powder',
           'price': 52,
           'quan': 122},
          '1005': {'brand': 'Quaker',
           'expiry': '30 oct 2022',
           'name': 'Quaker Oats',
           'price': 285,
           'quan': 30},
          '1006': {'brand': 'Saffola',
           'expiry': '29 jan 2022',
           'name': 'Saffola Active',
           'price': 207,
           'quan': 58},
          '1007': {'brand': 'Nestle',
           'expiry': '31 aug 2022',
           'name': 'Kitkat Desert',
           'price': 55,
           'quan': 59},
          '1008': {'brand': 'Dark Fantasy',
           'expiry': '21 feb 2022',
           'name': 'Dark Fantasy Choco Fills',
           'price': 90,
           'quan': 90},
          '1009': {'brand': 'Candyman Fantastik',
           'expiry': '28 dec 2021',
           'name': 'Candyman Fantasy',
           'price': 80,
           'quan': 95},
          '1010': {'brand': 'Lotte',
           'expiry': '01 jun 2022',
           'name': 'Lotte Choco Pie',
           'price': 110,
           'quan': 95},
          '1011': {'brand': 'Britania',
           'expiry': '15 jul 2022',
           'name': 'Britania Chocolate cake',
           'price': 120,
           'quan': 100},
          '1012': {'brand': 'Pillsbury',
           'expiry': '02 dec 2021',
           'name': 'Pillsbury cookes cake',
           'price': 90,
           'quan': 200},
          '1013': {'brand': 'Ore0',
           'expiry': '30 dec 2021',
           'name': 'Kraft Oreo Soft Cake',
           'price': 249,
```

```
'quan': 120},
      '1014': {'brand': 'Sunfeast',
       'expiry': '19 mar 2022',
       'name': "Mom's Magic Cashew",
       'price': 80,
       'quan': 180},
      '1015': {'brand': 'Cadbury',
       'expiry': '19 feb 2022',
       'name': 'Cadbury Oreo chacolate',
       'price': 60,
       'auan': 185}.
prod id = input("Enter the Product ID: ")
name = input("Enter the Name of the Product: ")
price = int(input("Enter the price per Item: "))
quan = int(input("Enter The Quantity of the Product you want to add: "))
expiry = input("Enter the expiry date of the Product: ")
brand = input("Enter the Brand of the product: ")
products[prod id] = {"name":name, "price":price, "quan":quan, "expiry":expiry, "brand":brand}
js = json.dumps(products)
fd = open("products.json","w")
fd.write(js)
fd.close()
     Enter the Product ID: 1037
     Enter the Name of the Product: Munch Chocolate
     Enter the price per Item: 5
     Enter The Quantity of the Product you want to add: 100
     Enter the expiry date of the Product: 31 Dec 2021
     Enter the Brand of the product: Nestle
import json
fd = open("products.json",'r')
r = fd.read()
fd.close()
products = json.loads(r)
print("Welcome to shop")
ui prod = input("Enter the product Id: ")
ui quan = int(input("Enter the quantity of the Product: "))
for i in products.keys():
    while ui prod == i:
        if ui quan <= products[i]['quan']:</pre>
```

```
print("
                              product:",products[ui_prod]['name'])
           print("
                                price:",products[ui prod]['price'])
                          Expiry date:",products[ui_prod]['expiry'])
           print("
           print(" Manufacturing Brand:",products[ui_prod]['brand'])
           print("***********************************")
           print("----- BILLING DETAILS:---- ")
           print("Total Amount: ",products[ui_prod]['price']*ui_quan)
           print("Enjoy Your Day")
           print("Thank You. Visit Again")
           print("*******************************")
           products[ui prod]["quan"] = products[ui prod]["quan"] - ui quan
       else:
           print("Sorry. Stock of product you enterd is: ",products[ui_prod]['quan'],"\nPlea
       break
if ui prod not in products.keys():
  print("Sorry. No product found for ID: ",ui prod,"\Please enter valid product ID")
js = json.dumps(products)
fd = open("products.json",'w')
fd.write(js)
fd.close()
## The sold items information is stored on sales.json
fd = open("sales.json",'r')
trans = fd.read()
fd.close()
sales = json.loads(trans)
num = len(sales)+1
sales[num] = {'prod':ui_prod, 'quan' : ui_quan, 'amount': products[ui_prod]['price'] * ui_qua
sale = json.dumps(sales)
fd = open("sales.json",'w')
fd.write(sale)
fd.close()
```

## products

```
{'1001': {'brand': 'Pepsi',
  'expiry': '20 oct 2023',
  'name': 'Pepsi Can',
  'price': 153,
  'quan': 50},
 '1002': {'brand': 'Tata',
  'expiry': '12 jan 2022',
  'name': 'Tata Salt',
  'price': 20,
  'quan': 130},
 '1003': {'brand': 'Tata',
  'expiry': '10 mar 2023',
  'name': 'Tata Tea Gold',
  'price': 48,
  'quan': 145},
 '1004': {'brand': 'Tata',
  'expiry': '23 jun 2023',
  'name': 'Turmeric Powder',
  'price': 52,
  'quan': 122},
 '1005': {'brand': 'Quaker',
  'expiry': '30 oct 2022',
  'name': 'Quaker Oats',
  'price': 285,
  'quan': 30},
 '1006': {'brand': 'Saffola',
  'expiry': '29 jan 2022',
  'name': 'Saffola Active',
  'price': 207,
  'quan': 58},
 '1007': {'brand': 'Nestle',
  'expiry': '31 aug 2022',
  'name': 'Kitkat Desert',
  'price': 55,
  'quan': 59},
 '1008': {'brand': 'Dark Fantasy',
  'expiry': '21 feb 2022',
  'name': 'Dark Fantasy Choco Fills',
  'price': 90,
```

```
'quan': 90},
      '1009': {'brand': 'Candyman Fantastik',
       'expiry': '28 dec 2021',
       'name': 'Candyman Fantasy',
       'price': 80,
       'quan': 92},
      '1010': {'brand': 'Lotte',
       'expiry': '01 jun 2022',
       'name': 'Lotte Choco Pie',
       'price': 110,
       'quan': 95},
      '1011': {'brand': 'Britania',
       'expiry': '15 jul 2022',
       'name': 'Britania Chocolate cake',
       'price': 120,
       'quan': 100},
      '1012': {'brand': 'Pillsbury',
       'expiry': '02 dec 2021',
       'name': 'Pillsbury cookes cake',
       Innical. 00
sales = {1 : {'prod':ui_prod, 'quan':ui_quan, 'amount':products[ui_prod]['price']*ui_quan}}
sal = json.dumps(sales)
fd = open("sales.json",'w')
fd.write(sal)
fd.close()
```

X