SathishKumar_Rajendiran_Dictionaries_Lab_Problem_2

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Title: "IST652 Lab2" Name: Sathish Kumar Rajendiran Date: 07/20/2020

Objective: Working with Dictionaries

stock = {"banana": 6, "apple": 0, "orange": 32, "pear": 15} prices = {"banana": 4, "apple": 2, "orange": 1.5, "pear": 3}

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[16]:
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# Lets play with dictionaries

# create dictionaries & Lookup list for stock and prices
stock = {"banana":6,"apple":0,"orange":32,"pear":15}
prices= {"banana":4,"apple":2,"orange":1.5,"pear":3}
itemlist = ['banana','apple','pear']

print('**********Lab Exercise 2 Begins**********\n')
# print values
print('current inventory from stock :',stock,'\n')
print('current inventory from prices :',prices,'\n')
print('Lookup list of inventory :',itemlist)
print('**********')

#build an user interface to working with dictionaries and list
while True:
    inp = input("""\nselect an option to continue
                  1.Enter "A" to add an item
                  2.Enter "F" to find an item
                  3.Enter "S" to sum of inventory of allitems
                  4.Enter "L" to sum of inventory based on list of items
                  5.Enter "P" to product of qty * price
                  6.Enter "Exit" to Quit:
                 > """)
    if inp == 'Exit':  #Exit from the loop
        print('\n**********Lab Exercise 2 Ends␣
↪**********')
        break
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   try:
        if inp == 'A':  # If Option A is chosen then add an item to stock and␣
↪prices dictionaries
            name = str.lower(input("Enter item name:"))
            qty = int(input("Enter quantity:"))
            price = float(input("Enter unit price:"))
            stock[name]=qty
            prices[name]=price

            print('\nstock{}\n')
            for key in stock:
                print (key,':', stock[key])

            print('\nprices{}\n')
            for key in prices:
                print (key,':', prices[key])

            print('\nItem added successfully!')
            ␣
↪print('\n*********************************************************************************

        if inp == 'F': # If Option F is chosen then lookup an item from stock
            name = str.lower(input("Enter item name: "))
            if name in stock.keys():
                print ('Item name:',name,'\nUnit price:
↪',prices[name],'\nInventory:',stock[name],'\n')
            else:
                print('\nItem not found in stock{}')
            ␣
↪print('\n*********************************************************************************

        if inp == 'S': # If Option S is chosen then calculate (Sum) of␣
↪inventory from stock
            if not stock:
                print('\nItem not found in stock{}')
            else:
                x = 0
                for i in stock.values():
                    x += i
                print('current inventory from stock :',stock,'\n')
                print('Total Inventory is:',x)
            ␣
↪print('\n*********************************************************************************
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       if inp == 'L': # If Option L is chosen then lookup list of items␣
↪against stock then calcualte(sum) of those items
           if not stock:
               print('\nItem not found in stock{}')
           else:
               lv = 0
               for k in itemlist:
                   if k in stock:
                       lv += stock[k]
                   else:
                       pass
               print('stock = ',stock)
               print('prices = ',itemlist,'\n')
               print('Total value in stock of based on the Lookup List is',lv)
           ␣
↪print('\n*************************************************************************
*****')

       if inp == 'P': # If Option P is chosen then multiply stock quantity␣
↪with its price from prices to find the total value of the inventory
           if not stock:
               print('\nItem not found in stock{}')
           else:
               plist = 0
               for k in stock:
                   if k in prices:
                       pv = float(stock[k]) * float(prices[k])
                       plist += pv
                   else:
                       pass
               print('stock = ',stock)
               print('prices = ',prices,'\n')
               print('Total value in stock is',plist)
           ␣
↪print('\n*************************************************************************
*****')

   except ValueError:
       print("Bad value")
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**********Lab Exercise 2 Begins**********

current inventory from stock : {'banana': 6, 'apple': 0, 'orange': 32, 'pear':
15}

current inventory from prices : {'banana': 4, 'apple': 2, 'orange': 1.5, 'pear':
3}

Lookup list of inventory : ['banana', 'apple', 'pear']
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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > A
Enter item name:Apple
Enter quantity:20
Enter unit price:2

stock{}

banana : 6
apple : 20
orange : 32
pear : 15

prices{}

banana : 4
apple : 2.0
orange : 1.5
pear : 3

Item added successfully!

**************************************************************************
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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > F
Enter item name: Mango

Item not found in stock{}

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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > A
Enter item name:Mango
Enter quantity:10
Enter unit price:3

stock{}

banana : 6
apple : 20
orange : 32
pear : 15
mango : 10

prices{}

banana : 4
apple : 2.0
orange : 1.5
pear : 3
mango : 3.0

Item added successfully!

*****************************************************************************
***

select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > F
Enter item name: Mango
Item name: mango
Unit price: 3.0
Inventory: 10
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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > S
current inventory from stock : {'banana': 6, 'apple': 20, 'orange': 32, 'pear':
15, 'mango': 10}

Total Inventory is: 83

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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > L
stock =  {'banana': 6, 'apple': 20, 'orange': 32, 'pear': 15, 'mango': 10}
prices =  ['banana', 'apple', 'pear']

Total value in stock of based on the Lookup List is 41

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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > P
stock =  {'banana': 6, 'apple': 20, 'orange': 32, 'pear': 15, 'mango': 10}
prices =  {'banana': 4, 'apple': 2.0, 'orange': 1.5, 'pear': 3, 'mango': 3.0}

Total value in stock is 187.0
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select an option to continue
                 1.Enter "A" to add an item
                 2.Enter "F" to find an item
                 3.Enter "S" to sum of inventory of allitems
                 4.Enter "L" to sum of inventory based on list of items
                 5.Enter "P" to product of qty * price
                 6.Enter "Exit" to Quit:
                > Exit

**********Lab Exercise 2 Ends **********
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[15]:
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print('End of Lab2 Exercise!')
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End of Lab2 Exercise!
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