**Code:**

#File name: dict.py

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#Purpose: Lab #2, show proficiencies with dictionaries

if \_\_name\_\_ == "\_\_main\_\_":

#Initializing the dictionaries

stock = {"banana": 6, "apple": 0, "orange": 32, "pear": 15}

prices = {"banana": 4, "apple": 2, "orange": 1.5, "pear": 3}

#a. Show the expression that gets the value of the stock dictionary at the

#key ‘orange’. Show a statement that adds an item to the stock dictionary

#called ‘cherry’ with some integer value and that adds ‘cherry’ to the prices

#dictionary with a numeric value. (Or pick your own fruit name.)

#indexing orange on stock

print("There are {:d} oranges in stock".format(stock["orange"]))

#adding cheries to prices

prices["cherries"] = 7

print("Cherries are now ${:.2f}".format(prices["cherries"]))

#b. Write the code for a loop that iterates over the stock dictionary and

#prints each key and value.

#starting loop

for key, value in stock.items():

#printing each key and value using from the items method

print("key: {:s}\tprice: {:d}".format(key, value))

#c. Suppose that we have a list:

groceries = ["apple", "banana", "pear"]

#Write the code that will sum the total number in stock of the items in the

#groceries list.

#Starting the summation at 0

totStock = 0

#Looping through the groceries list

for item in groceries:

#getting the item from the stock, if not there make it zero

totStock += stock.get(item, 0)

print("There are {:d} items from the grocery list in stock".format(totStock))

#d. Write the code that can print out the total value in stock of all the

#items. This program can iterate over the stock dictionary and for each item

#multiply the number in stock times the price of that item in the prices

#dictionary. (This can include the items for ‘cherry’ or not, as you choose.)

#Initializing the price

totPrice = 0

#Looping through all they keys in stock

for item in stock.keys():

#multiplying the price

totPrice += stock.get(item, 0) \* prices.get(item, 0)

#printing total price of the stock

print("The total price of the stock is ${:.2f}".format(totPrice))

**Output:**

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