PracticeExercisesMod5

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1 Practice Exercises Module 5

1.1 Beija Richardson 4/18/2025

1.2 From Think Python, Chapter 10,

10.11.2

Use get to write a more concise version of value_counts. You should be able to eliminate the if statement.

[60]:
```
fruits = ['apple', 'pear', 'banana', 'orange', 'melon', 'pineapple', 'apple',␣
↪'banana']
```

[62]:
```
def value_counts(lst):
    counts = {}
    for item in lst:
        counts[item] = counts.get(item, 0) + 1
    return counts
```

[64]:
```
dictionary_ex1 = value_counts(fruits)
print(dictionary_ex1)
```

```
{'apple': 2, 'pear': 1, 'banana': 2, 'orange': 1, 'melon': 1, 'pineapple': 1}
```

10.11.4

[67]:
```
def find_repeats(counter):
    """Makes a list of keys with values greater than 1.

    counter: dictionary that maps from keys to counts

    returns: list of keys
    """
```

[69]:
```
counter = {'apple': 2, 'banana': 3, 'pear': 1, 'orange': 4, 'melon': 1}

repeated_keys = find_repeats(counter)
print(repeated_keys)
```

```
None
```

1.3 Learning SQL Problems

6-2

SELECT FirstName, LastName FROM Customers WHERE CustomerType = 'Individual'

UNION

SELECT FirstName, LastName FROM Employees;

6-3

SELECT FirstName, LastName FROM Customers WHERE CustomerType = 'Individual'

UNION

SELECT FirstName, LastName FROM Employees

ORDER BY LastName;

8-1

SELECT COUNT(*) AS TotalAccounts FROM Account;

8-2

SELECT CustomerID, COUNT(*) AS AccountCount FROM Account GROUP BY CustomerID;

10-1

SELECT p.product_cd,p.name AS ProductName, a.account_id, a.customer_id FROM Product p LEFT JOIN Account a ON p.product_cd = a.product_cd;

[ ]: