Finger Exercises Lecture 14

The questions below are due on Monday October 31, 2022; 03:00:00 PM.

1) Question 1 of 2

Implement the function that meets the specification below.:

```
def keys_with_value(aDict, target):
    """
    aDict: a dictionary
    target: an integer or string
    Assume that keys and values in aDict are integers or strings.
    Returns a sorted list of the keys in aDict with the value target.
    If aDict does not contain the value target, returns an empty list.
    """
    # Your code here

# Examples:
aDict = {1:2, 2:4, 5:2}
target = 2
print(keys_with_value(aDict, target)) # prints the list [1,5]
```

```
1  # your function here
       results = []
       for k,v in aDict.items():
           if v == target:
               results.append(k)
       results.sort()
       return results
```

You have infinitely many submissions remaining.

Here is the solution we wrote:

```
def keys_with_value(aDict, target):
    target_keys = []
    for i in aDict.keys():
        if aDict[i] == target:
            target_keys.append(i)
    target_keys.sort()
    return target_keys
```

2) Question 2 of 2

Implement the function that meets the specification below.:

```
def all_positive(d):
    """
    d is a dictionary that maps int:list
    Suppose an element in d is a key k mapping to value v (a non-empty list).
    Returns the sorted list of all k whose v elements sums up to a
    positive value.
    """
    # Your code here

# Examples:
d = {5:[2,-4], 2:[1,2,3], 1:[2]}
print(all_positive(d))   # prints the list [1, 2]
```

```
1  # your function here
        results = []
        for k,v in d.items():
            if sum(v) > 0:
                results.append(k)
        results.sort()
        return results
```

You have infinitely many submissions remaining.

Here is the solution we wrote:

```
def all_positive(d):
    L = []
    for k,v in d.items():
        if sum(v) > 0:
            L.append(k)
    return sorted(L)
```

6.100L Introduction to CS and Programming Using Python

Fall 2022