course_2_assessment_8

Due: 2018-11-25 01:33:00

Description: Assessment for Sorting lesson

Score: 0 of 8 = 0.0%

Questions

Not yet graded

Sort the following string alphabetically, **from z to a**, and assign it to the variable `sorted_letters` .

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```
1 letters = "alwnfiwaksuezlaeiajsdl"
2 sorted_letters = sorted(letters, reverse = True)
```

Activity: 16.9.1 ActiveCode (ac18_7_1)

Result	Actual Value	Expected Value	Notes
Pass	['z',... 'a']	['z',... 'a']	Testing that sorted_letters has the correct value.

Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_1)

Not yet graded

Sort the list below, `animals` , into alphabetical order, a-z. Save the new list as `animals_sorted` .

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```
animals = ['elephant', 'cat', 'moose', 'antelope',
           'elk', 'rabbit', 'zebra', 'yak', 'salamander',
           'deer', 'otter', 'minx', 'giraffe', 'goat', 'cow',
           'tiger', 'bear']
animals_sorted = sorted(animals)
```

Activity: 16.9.2 ActiveCode (ac18_7_2)

Result	Actual Value	Expected Value	Notes
Pass	['ant...bra']	['ant...bra']	Testing that animals_sorted was created correctly.

Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_2)

Not yet graded

The dictionary, `medals` , shows the medal count for six countries during the Rio Olympics. Sort the country names so they appear alphabetically. Save this list to the variable `alphabetical` .

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```
medals = {'Japan':41, 'Russia':56, 'South Korea':21,
          'United States':121, 'Germany':42, 'China':70}
alphabetical = sorted(medals.keys())
```

Activity: 16.9.6 ActiveCode (ac18_7_3)

Result	Actual Value	Expected Value	Notes

Pass	['Chi...tes']	['Chi...tes']	Testing that alphabetical value is assigned to correct values.	Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_3)

Not yet graded

Given the same dictionary, `medals` , now sort by the medal count. Save the three countries with the highest medal count to the list, `top_three` .

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```
1 top_three = []
2 medals = {'Japan':41, 'Russia':56, 'South Korea':21,
3           'United States':121, 'Germany':42, 'China':70}
4 def top(key,d):
5     return d[key]
6 top_three = sorted(medals.keys(), key = lambda x : top(x,medals), reve
```

Activity: 16.9.7 ActiveCode (ac18_7_4)

Result	Actual Value	Expected Value	Notes	
Pass	['Uni...sia']	['Uni...sia']	Testing that top_three value is assigned to correct values.	Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_4)

Not yet graded

We have provided the dictionary `groceries`. You should return a list of its keys, but they should be sorted by their values, from highest to lowest. Save the new list as `most_needed`.

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```
groceries = {'apples': 5, 'pasta': 3, 'carrots': 12,
             'orange juice': 2, 'bananas': 8, 'popcorn': 1,
             'salsa': 3, 'cereal': 4, 'coffee': 5,
             'granola bars': 15, 'onions': 7, 'rice': 1,
             'peanut butter': 2, 'spinach': 9}
def most(key,d):
    return d[key]
most_needed = sorted(groceries.keys(), reverse = True, key = lambda x
```

Activity: 16.9.8 ActiveCode (ac18_7_5)

Result	Actual Value	Expected Value	Notes
Pass	['gra...orn']	['gra...orn']	Testing that most_needed was created correctly.

Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_5)

Not yet graded

Create a function called `last_four` that takes in a single ID number and returns the last four digits. For example, the number 17573005 should return 3005. Then, use the resulting function to sort the list of ids stored in the variable, `ids`, from lowest to highest. Save this sorted list in the variable, `sorted_ids`. Hint: Remember that only strings can be indexed, so conversions may be needed.

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```
def last_four(x):
    return(str(x)[-4:])
ids = [17573005, 17572342, 17579000, 17570002, 17572345, 17579329]
sorted_ids = sorted(ids , key = last_four)
```

Activity: 16.9.9 ActiveCode (ac18_7_6)

Result	Actual Value	Expected Value	Notes
Pass	[1757...9329]	[1757...9329]	Testing that sorted_ids is assigned to correct values.

Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_6)

Not yet graded

Sort the list `ids` by the last four digits of each id. Do this using lambda and not using a defined function. Save this sorted list in the variable `sorted_id` .

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```
ids = [17573005, 17572342, 17579000, 17570002, 17572345, 17579329]
sorted_id = sorted(ids, key = lambda x : str(x)[-4:])
```

Activity: 16.9.10 ActiveCode (ac18_7_7)

Result	Actual Value	Expected Value	Notes
Pass	[1757...9329]	[1757...9329]	Testing that sorted_id is assigned to correct value.
Pass	'lambda'	'ids =...-4:])'	Testing your code (Don't worry about actual and expected values).

Expand Differences

Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_7)

Not yet graded

Sort the following list by each element's second letter a to z. Do so by using lambda. Assign the resulting value to the variable `lambda_sort` .

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```
1 ex_lst = ['hi', 'how are you', 'bye', 'apple', 'zebra', 'dance']
2 lambda_sort = sorted(ex_lst , key = lambda x : str(x[1]))
```

Activity: 16.9.11 ActiveCode (ac18_7_8)

Result	Actual Value	Expected Value	Notes	
Pass	['dan...bye']	['dan...bye']	Testing that lambda_sort has the correct value.	Expand Differences
Pass	'lambda'	'ex_ls... [1]))'	Testing your code (Don't worry about actual and expected values).	Expand Differences

You passed: 100.0% of the tests

Question in Context (/runestone/books/published/fopp/Sorting/ChapterAssessment.html#ac18_7_8)

Score Me