Lab: Higher Order Functions

The focus of this lab is to use some of the higher order functions in Python with the set of values held in the low score dictionary.

Using the information in the Low Score dictionary you should:

1. Count the number of scores currently held
2. Filter out all scores below a specific threshold (say 2)
3. Sort the low scores into ascending and descending order.
4. Sort all the low scores above a specific threshold (2) into ascending and descending order

Note for all of the above we should see who the user was for each score – you cannot just take the scores from the dictionary.

Remember on a dictionary, items() returns a list containing a set of tuples in which the first element in the tuple is the key and the second element is the values for that key.

Also add some docstrings to your functions using restructured text formatting. See the results in the editor using the pop ups for those functions when you use them.

Finally, use the list comprehension to create a suitably formatted printout for each element in the guess history – this could be a string that includes any formatting information. The resulting list should be printable. The list comprehension could use a named function to format an entry within the history. This function could be a lambda or defined within the enclosing function.

For example, the output might look like:

```
------------------------
Guess[4]
Sorry wrong number
Your guess was lower than the number
------------------------
Guess[8]
Sorry wrong number - you were out by 1
------------------------
Guess[6]
Sorry wrong number - you were out by 1
------------------------
Guess[7]
Correct Guess
```