

CSCI 161 Lab Assignment 6

Points 10

Objective:

To work with dictionaries in python.

Assignment:

Create a function ***menu()***, for displaying the following options.

Option 1: Create and display the dictionary.

Option 2: Search a value in the dictionary.

Option 3: Sort the dictionary based on keys.

Option 4: Display the keys and values of the dictionary as two separate lists.

Option 5: Exit

If the user input for the option is 1, then call ***display()***, which will create a dictionary by taking the user input items for (key, value) for the dictionary and display it. The keys of the dictionary are integer type and the values of the dictionary are strings.

If the user input for the option is 2, then call ***search()***, which will accept a user input value as string and check whether the entered value exists in the dictionary or not.

If the user input for the option is 3, then call ***sort()***, which sort the dictionary based on the keys in the dictionary.

If the user input for the option is 4, then call ***lists()***, which will get the keys and values from the dictionary and display them as two separate lists, where the two lists are sorted.

If the user input for the option is 5, then exit from the program.

Only option to exit from the menu is option 5.

Sample Output:

1. Create and Display the dictionary
2. Search an element
3. Sort the dictionary based on key
4. Display the lists
5. Exit

Enter an option: 1

Enter the key: 3

Enter the value: Meera

Dictionary is: {3: 'Meera'}

1. Create and Display the dictionary
2. Search an element
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4. Display the lists
5. Exit

Enter an option: 1

Enter the key: 2

Enter the value: Aydan

Dictionary is: {3: 'Meera', 2: 'Aydan'}

1. Create and Display the dictionary
2. Search an element
3. Sort the dictionary based on key
4. Display the lists
5. Exit

Enter an option: 2

Enter your value: Meera
Value exists

1. Create and Display the dictionary
2. Search an element
3. Sort the dictionary based on key
4. Display the lists
5. Exit

Enter an option: 2

Enter your value: Ram
Value does not exists

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1. Create and Display the dictionary
2. Search an element
3. Sort the dictionary based on key
4. Display the lists
5. Exit

Enter an option: 3

Sorted dictionary is:  [(2, 'Aydan'), (3, 'Meera')]

1. Create and Display the dictionary
2. Search an element
3. Sort the dictionary based on key
4. Display the lists
5. Exit

Enter an option: 4

Key values are:  [2, 3]

Values are:  ['aydan', 'meera']

1. Create and Display the dictionary
2. Search an element
3. Sort the dictionary based on key
4. Display the lists
5. Exit

Enter an option: 5
student@CSCILab21:~/Desktop$

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Instructions:

- Preferred programming environment:
 - OS : Linux (Mint)
 - Interpreter : Python 3 (not Python 2)
 - Editor : gedit or editor of your choice
- The program is saved as a file with .py extension.
- The program should include a comment block at the top with your name, course number and course section, assignment number
 - For example:
 - # Your name
 - # CSCI II 161 L01/L02
 - # Assignment 6
- Upload your file as your *lastname_firstname_assignmentnumber.py*

For example:

lastname_firstname_6.py