System Requirements Specification Index

For

Python Skills Evaluation

Version 1.0

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USE CASE DESCRIPTION

Use Case 1

Write a python program to perform dictionary operations such as 1. Add element to Dictionary 2. Delete a pair from dictionary 3. Display dictionary 4. Check key availability of dictionary, based on the user choice.

Sample Input:If choice is 1 and key: 101, value:" Teja"

Sample Output: {101: "Teja"}

Description

1. Take console input of user choice as 1, key, value and pass key, value to the method **dict_add(key,value)** and write the logic to add elements to the dictionary and return the dictionary to main method.
2. Take console input of user choice as 2, key and pass key to the method **dict_del(key)** and write the logic to delete an element from the dictionary. If key deletes then return "TRUE" else return "FALSE" to the main method.
3. Take console input of user choice as 3 and invoke method **dict_display()** and write the logic to display the elements of dictionary by returning it to main.
4. Take console input of user choice as 4, keyand pass key to the method **dict_check(key)** and write the logic to find element from the dictionary. If key is available then return "TRUE" else return "FALSE" to the main method.

Use Case 2

Write a python program to perform set operations such as 1: Union 2: Intersection 3: Difference 4: Symmetric Difference on 3 given sets A, B, C, based on the user choice.

Sample Input: If choice is 1 and setsA={1,2,3,4} B={2,10,4,20}C={4,10,40,30,2}

Sample Output: {1,2,3,4,40,10,20,30}

Description

1. There are 3 sets are given in the main method as A,B,C.
2. Take console input of user choice either 1 or 2 or 3 or 4 and pass any one user choice and 3 sets A, B, C the method **set_operations(choice,A,B,C).**
3. If choice is 1 write the logic on set 'Union'in the method **set_operations**and return result to main method and display.
4. If choice is 2 write the logic on set 'Intersection' in the method **set_operations** and return result to main method and display.
5. If choice is 3 write the logic on set 'Difference' in the method **set_operations** and return result to main method and display.
6. If choice is 4 write the logic on set 'Symmetricdifference' in the method **set_operations** and return result to main method and display.

Execution Steps to Follow:

1. All actions like build, compile, running application, running test cases will be through Command Terminal.
2. To open the command terminal the test takers, need to go to

   Application menu (Three horizontal lines at left top) -> Terminal ->New Terminal.

3. The editor Auto Saves the code.
4. If you want to exit(logout) and to continue the coding later anytime (using Save & Exit option on Assessment Landing Page) then you need to use CTRL+Shift+B command compulsorily on code IDE. This will push or save the updated contents in the internal git/repository. Else the code will not be available in next login.
5. These are time bound assessments the timer would stop if you logout and while logging in back using the same credentials the timer would resume from the same time it was stopped from the previous logout.
6. To run application for use case1 use the following command

   python3 dict_main.py

7. To run application for use case2 use the following command

   python3 set_main.py

8. Mandatory: Before final submission run the following command

   python3 -m unittest

9. Once you are done with development and ready with submission, you may navigate to the previous tab and submit the workspace. It is mandatory to click on "Submit Assessment" after you are done with code.
10. You need to use CTRL+Shift+B - command compulsorily on code IDE, before final submission as well. This will push or save the updated contents in the internal git/repository, and will be used to evaluate the code quality.