## **Practice Problems**

- An University has published the results of the term end examination conducted in April. List
  of failures in physics, mathematics, chemistry and computer science is available. Write a
  program to find the number of failures in the examination. This includes the count of failures
  in one or more subjects.
- 2. Write a Python program to find the index of an item of a tuple.
- 3. Write a Python program to add an item in a tuple.
- 4. Write a Python program to convert a tuple to a string.
- 5. Write a Python program to get the 4th element and 4th element from last of a tuple.
- 6. Write a Python program to find the repeated items of a tuple.
- 7. Write a Python program to check whether an element exists within a tuple.
- 8. Write a Python script to sort (ascending and descending) a dictionary by value.
- 9. Write a Python script to add a key to a dictionary.

```
Sample Dictionary : {0: 10, 1: 20}
Expected Result : {0: 10, 1: 20, 2: 30}
```

10. Write a Python script to concatenate following dictionaries to create a new one.

Sample Dictionary:

```
dic1={1:10, 2:20}
dic2={3:30, 4:40}
dic3={5:50,6:60}
Expected Result: {1: 10, 2: 20, 3: 30, 4: 40, 5: 50, 6: 60}
```

11. Write a Python script to print a dictionary where the keys are numbers between 1 and 15 (both included) and the values are square of keys.

```
Sample Dictionary
```

```
{1: 1, 2: 4, 3: 9, 4: 16, 5: 25, 6: 36, 7: 49, 8: 64, 9: 81, 10: 100, 11: 121, 12: 144, 13: 169, 14: 196, 15: 225}
```

- 12. Write a Python script to merge two Python dictionaries.
- 13. Write a Python program to iterate over dictionaries using for loops.
- 14. Write a Python program to sum all the items in a dictionary.