Chap 3: Data Structures in Python

1. Define List.
2. Explain with example.
    a. How to define list & access values in the list?
    b. How to delete values from the list?
    c. How to update list?
3. List and explain basic built-in function of list with example.
4. Define tuple.
5. Explain with example.
    a. How to define tuple & access values in the tuple?
    b. How to delete values from the tuple?
    c. How to update tuple?
6. List and explain basic built-in function of tuple with example.
7. Define SET.
8. Explain with example.
    a. How to define SET & access values in the SET?
    b. How to delete values from the SET?
    c. How to update SET?
9. List and explain basic built-in function of SET with example.
10. Define Dictionary.
11. Explain with example.
    a. How to define Dictionary & access values in the Dictionary?
    b. How to delete values from the Dictionary?
    c. How to update Dictionary?
12. List and explain basic built-in function of Dictionary with example.
13. Differentiate
    a. Extend & Append method of list.
    b. Add & update method of set.
14. Explain with example remove(),discard(),pop(),clear() with example.
15. Explain set operations union/intersection/difference/ symmetric_difference with diagram & example.
16. Write a Python program to sum all the items in a list.
17. Write a Python program to multiplies all the items in a list.
18. Write a Python program to get the largest number from a list.
19. Write a Python program to get the smallest number from a list.
20. Write a Python program to reverse a list.
21. Write a Python program to find common items from two lists.
22. Write a Python program to select the even items of a list.
23. Create a tuple and find the minimum and maximum number from it.
24. Print the number in words for Example: 1234 => One Two Three Four
25. Write a Python program to create a set, add member(s) in a set and remove one item from set.

26. Write a Python program to perform following operations on set: intersection of sets, union of sets, set difference, symmetric difference, clear a set.
27. Write a Python script to sort (ascending and descending) a dictionary by value.
28. Write a Python script to concatenate following dictionaries to create a new one.
29. Write a program to input any two tuples and interchange the tuple variable.
30. Use of any four methods of tuple in python?
31. Explain why tuples are called as immutable