## Tuple

- 1. Immutable
- 2. Indexing
- 3. Slicing
- 4. Concatenation, Repetition
- 5. Type
- 6. Type casting: list, set, string, dictionary
- 7. Empty tuple: t = ()
- 8. Tuple with one element : t = (1,) or 1, not this [(1)-int]
- 9. Tuple with multiple elements : t = (1,2,3) or 1,2,3
- 10. Functions : len(), sorted(), index(), count()
- 11. Packing and unpacking:  $t=1,2,3 \Rightarrow a,b,c=t \Rightarrow a=1,b=2,c=3$
- 12. Nesting
- 13. Multiple return to create tuple
- 14. Del to delete entire tuple

## Sets

- 1. Mutable
- 2. Empty set
- 3. With one element :  $s = \{1\}$
- 4. With multiple elements: {1,4,3}
- 5. Type
- 6. Type casting: list, tuple, dictionary, string
- 7. Functions: add(), update(), remove(), discard(), pop(), clear(), union(), intersection(), difference(), symmetric\_difference()
- 8. Set operations:union ||,intersection &,difference -,symmetric difference ^
- 9. Nesting
- 10. Del to delete entire set

## Dictionary

- 1. Mutable and unordered
- 2. Type
- 3. Functions: keys(), values(), items(), zip(), get(key), get(key,return), len(), update(), pop(key), clear()
- 4. Add or change new key with value
- 5. Zip to pair of lists, tuples, sets, dictionary
- 6. Zip displays those which have key and value. Other are ignored
- 7. Del keyword