Python Training.....

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Agenda

- String
- Data Structures
  - List
  - Tuple
  - Set
  - Dictionary

String

- Its a sequence of characters
- Single Quotes & Double Quotes are treated similar
- Triple Quotes : doc-string, multiline comments
- Strings are immutable
- Representation & Slicing
- Methods :-
  - count
  - index
  - find
  - join
  - Isalnum, isalpha, isdigit, islower, isspace, isupper
  - lstrip, rstrip, replace, partition, split, rsplit
  - endswith, startswith

List

- Ordered collections of heterogenous objects
- Representation is similar to String
- Mutable, can grow and shrink whenever required
- Methods :-
  - count
  - append
  - extend
  - index
  - insert, pop, remove, reverse, sort
  - __add__, __contains__, __eq__, __ge__, __sizeof__ .....

Tuple

- Ordered collections of heterogenous objects
- Representation is similar to String, List
- Immutable
- Methods :-
  - count
  - index
  - __mul__, __add__, __contains__, __eq__, __ge__, __sizeof__ .....

Set

- Ordered collections of heterogenous unique objects
- Representation is similar to String, List but cannot be sliced or accessed using index
- Mutable
- Methods :-
  - add
  - pop
  - clear
  - copy
  - discard v/s remove (raise KeyError)
  - difference, intersection, union .....

Dictionary

- Unordered collection of key-value pairs
- Representation is similar to String, List but cannot be sliced or accessed using index.
- Mutable
- Methods :-
  - copy
  - fromkeys
  - has_key
  - items
  - keys, values
  - iteritems, iterkeys, itervalues
  - pop, popitem
  - viewitems, viewkeys, viewvalues

Slicing

Slicing : extracting specific set of data from the container.

Lists, Strings & Tuple support Slicing

Reverse Indexing

Write a program to accept string/list from user and print it in reverse order

To be Studied & Tried

- bytearray
- xrange
- deque
- defaultdict