



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 heterogeneous 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