

Topics for Today:

⇒ Loops

⇒ Iteration protocol

⇒ Functions, arguments and return

⇒ Common data structures:

⇒ list, set, tuple, dict

* For any object to be used in for loop it must be iterable i.e. its class must implement two methods

⇒ iter

⇒ next

ex: str is iterable: iter('Hello') ✓

int is Not: iter(10) ✗

⇒ Common functions used for creating iterables:

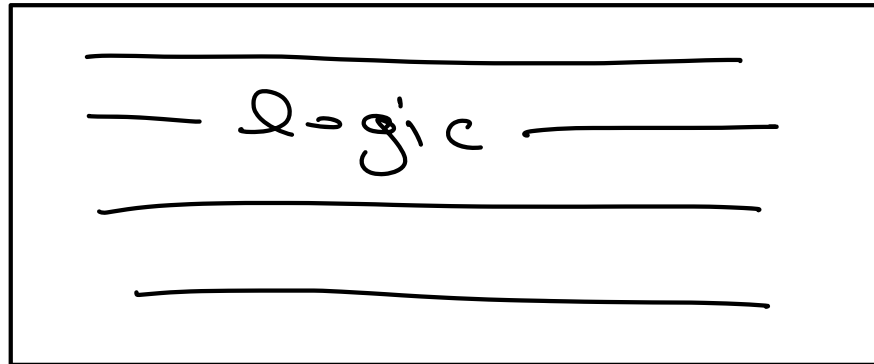
① Range (start, end, jump)

② Enumerate

Functions

- 1) Reusable Code
- 2) Modular/easy maintenance

def function_name (args):



return Value

↘ yield

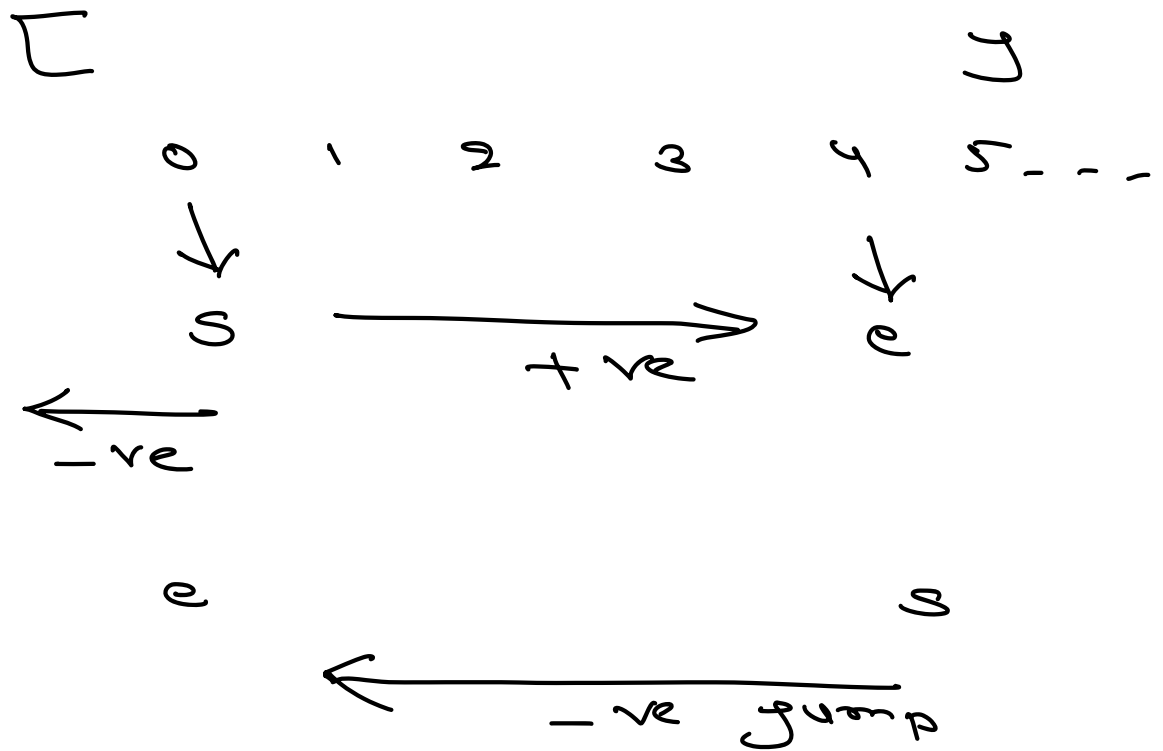
Data Structure

- List
- Tuple
- Set
- Dictionary

List

- 1) List are Mutable
- 2) Heterogeneous
- 3) Dynamic
- 4) Ordered

Slicing



Tuple

- 1) Same as list but immutable

Set

- Collection of Unique elements
- Ordered or Unordered
Insertion Ordered
(Python 3.7)

Dict

$\{ K : V \}$
↓ ↓
key value

Key

- Can not be duplicate
- Can only be 'immutable'

Doubt Solving

Memory allocation for mutables

```
list = []  
list.append(1)  
list.append(2)  
list.append('Hello')
```

