

ABSTRACT DATA TYPEABSTRACT DATA TYPES

• LIST		
• DICTIONARIES	::	KEY-VALUE PAIRS
• SETS	::	UNORDERED COLLECTION OF ELEMENTS
• FILES / STREAMS	::	DIRECTED DATA WITH OR WITHOUT BOUNDS

CONTAINER

- PRIORITY QUEUE
- STACK
- QUEUE

3 OPERATIONS ARE ALLOWED:

+ IS_EMPTY

+ ADD

+ REMOVE

→ STACK

LIFO [LAST IN FIRST OUT]: ADD = PUSH
REMOVE = POP

class Stack:

^{mm}
=== PRIVATE ATTRIBUTES ===

@TYPE - ITEMS: LIST

THE ITEMS IN THE STACK.

THE BACK OF THE LIST WILL STORE THE TOP
OF THE STACK.

^{mm}
→ DEF __INIT__(SELF):
→ → SELF._ITEMS = []

→ DEF IS_EMPTY(SELF):

→ → RETURN (SELF._ITEMS) == 0

→ DEF PUSH(SELF, ITEM):

→ → SELF._ITEMS.append(ITEM)

→ DEF POP(SELF):

→ → IF LEN(SELF._ITEMS) != 0:

→ → → RETURN SELF._ITEMS.pop() # THIS POP IS THE LIST POP

OR

→ IF SELF.IS_EMPTY():

PASS

ELSE:

RETURN SELF._ITEMS.pop()

DO BETTER THAN FAILING SILENTLY.