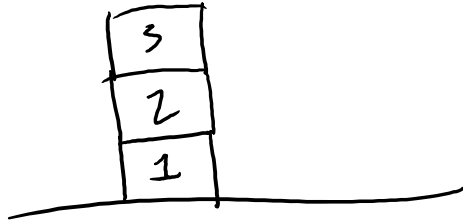


# 2018-09-04 Stacks & Queues

Tuesday, September 4, 2018 2:56 PM

- A stack defines how data can be inserted, accessed, and retrieved
- NOTE: does not specify how to do this in concrete terms.
- A stack can be implemented on top of a array (vector) or linked list
- A stack has the following rules
  - (FILO) What goes into the stack first must come out last. Written another way:
  - (LIFO) What comes in to the stack last must come out first.
- The quintessential stack conceptually is just a stack of boxes:



- Stacks occur natural IRL all the time. Stacks of boxes, plates, pez.
- All stacks must provide the programmer with the following function:
  - Add (push)
  - Remove (pop)
  - Size