

We learned about how Python lists are implemented


- contiguous \therefore indexing is vv fast
- expansion room (at the end only) \therefore insert or delete at end is vv fast
- " " at front is slow
- " " in middle in between

We ran experiments on 2 implementations of Stack

- aside: plug-in plug-out capability.
- push + pop at end of Python list way faster!
- a lot of work!

Pencil + paper

- tedious
- also: are all "steps" equal? Which to count?

Goal:  what's the shape?

Solution: big-oh

$$\begin{array}{ccccccc} O(1) & O(\log_r n) & O(n) & O(n^2) & O(2^n) \\ & & & \swarrow & \searrow \\ & & & n^2 + 3n - 17 & 1000n^2 + 503 \end{array}$$