

# Max Stack

- Design a stack that supports push, pop, top, and retrieving the maximum element in constant time.
- push(x) -- Push element x onto stack.
- pop() -- Removes the element on top of the stack.
- top() -- Get the top element.
- getMax() -- Retrieve the maximum element in the stack.

# Max Stack思路

- One stack cannot tell the max in  $O(1)$
- Need another stack to store the max
- time  $\Leftrightarrow$  space