Announcements

- Lab on Wednesday this week 
  (tomorrow is normal lecture)

- Next HW-up today
Stack: a way to store a list of data

Ex: Web browser: Store history for "back" button

Ex: Text editors: Store previously used commands

empty stack

LIFO
The stack ADT:

- supports 2 main functions:
  - push(e): add e to "top" of the stack
  - pop(): remove e from the stack
- **top()**: returns top element of the stack without removing it.

- **empty()**: returns true if stack is empty.

- **size()**: returns # of objects in the stack.
The Standard template library
- has iostream, string, etc.
- Also has basic data structures!
  (We'll be coding our own anyway.)
- See cplusplus.com for documentation...
How to implement?

- array
- linked list

private:
int size;

private:
int size;
SLinkedList S;

Object* a;

size-1

capacity
Note:

From the outside, these look the same.

- still test via:

```c++
Stack<int> mystack;
mystack.push(12);
mystack.push(11);
std::cout << mystack.top() << std::endl;
mystack.pop();
// etc.
```