CS 225

#11: Stack

September 22, 2017

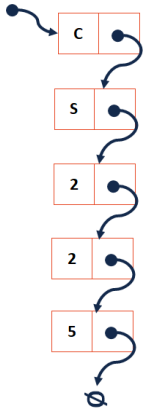
Running times of List operations:

	Singly Linked List	Array
Insert/Remove at **front**		
Insert at **given** location		
Remove at **given** location		
Insert at **arbitrary** location		
Remove at **arbitrary** location		

Stack Implementation #1: _____

Stack.h

```
1  #ifndef STACK_H
2  #define STACK_H
3
4  template <class T>
5  class Stack {
6    public:
7
8
9
10
11
12
13   private:
14
15
16
17
18 };
19 #endif
```



Stack.cpp

```
1  #include "Stack.h"
2
3  void Stack::push(T & t) {
4
5
6
7
8
9
10 }
11
12 T & Stack::pop() {
13
14
15
16
17
18
19 }
```

1. A stack is a _____ data structure.

   ...that stands for:

Stack Implementation #2: _____

Stack.h

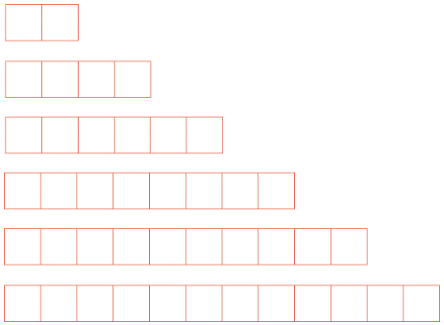
```
1  #ifndef STACK_H
2  #define STACK_H
3
4  template <class T>
5  class Stack {
6    public:
7
8
9
10
11
12
13   private:
14
15
16
17
18 };
19 #endif
```

Stack.cpp

```
1  #include "Stack.h"
2
3  void Stack::push(T & t) {
4
5
6
7
8
9
10 }
11
12 T & Stack::pop() {
13
14
15
16
17
18
19 }
```

Resize Strategy – Details:

Strategy #1:



Strategy #2:

CS 225 – Things To Be Doing:

1. Exam #3 starts Monday
2. MP2 is due Sept. 25
3. Lab Extra Credit → Attendance in your registered lab section!
4. Daily POTDs