

CS368 Lecture 6

Wednesday 8 October 2014

Reminders:

- P1 graded, feedback available
- P2 assigned, due Tuesday October 21
- Reading: Chapter 4, Linked Lists

Last class:

- `typedef`
- `void`
- Static variables
- More pointers
 - Pointers as return types
 - Pointers to functions
 - Pointers to pointers
 - Arrays of pointers

Today:

- Classes
- Header Files
- More preprocessor commands

Pointers to Functions

```
int foo() { ... }

int (*fp) ();
fp = foo; // NOT fp = foo();

fp();
(*fp)();
```

Why would this ever be useful?

Using typedef with function pointers

```
typedef bool (*compareFunction) (int, int);

void sortFunction(int* list, compareFunction cmp) { ... }
```

Classes

Encapsulation

Abstraction

Re-use

Walking through an example

Header files

“Header guards”:

`#ifndef, #define` preprocessor commands

public vs. private

using const

Source files

Constructor Basics

Scope resolution operator