Extending Classes

- Build classes that extend functionality of existing class

- Say we want to define Frosh as a subclass of Student
  - Frosh have all the same properties as Students
  - Frosh start with 0 units
  - We specially designate "Frosh" in string display of object
    - Just because your RAs love you!

Extending Classes

```
public class Frosh extends Student {

  public Frosh(String name, int id) {
    super(name, id); // calls Student constructor
    setUnits(0);
  }

  // Override toString method of Student
  public String toString() {
    // studentID and studentName are private,
    // so they are not directly accessible, even
    // in subclass!  Must use public "getters".
    return ("Frosh: " + getName() +
            " (#" + getID() + ")");
  }
}
```

- Everything else is **inherited** from Student