

CS210

Discussion

Week 6

Attendance

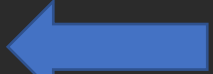


Today

- Exercise hints
- Finish through exercise 3
 - Show us passing Gradescope tests to leave early

Exercise Hints

- Casting to a Die object `Die otherDie = ((Die) other);`
- Die `toString` method should print 3 rows of 5 characters, each separated by a newline
 - i.e `5 = "* * \n * \n* *";`
 - `0 = "Not rolled yet";`
- Remember, you can access the instance variables of another object (so long as they're accessible)

```
public double distanceTo(Location other) {  
    double otherLat = other.lat; 
```

- Great circle distance for `Location.java`
$$d = 6359.83 \arccos(\sin(x_1) \sin(x_2) + \cos(x_1) \cos(x_2) \cos(y_1 - y_2)).$$
- Euclidean distance for `Point3D.java`
 - $\sqrt{(x_1 - x_2)^2 + (y_1 - y_2)^2 + (z_1 - z_2)^2}$
- Remember you can use existing compare methods
 - `Double.compare();` `"some-string".compareTo();`