

CSE 11

Accelerated Intro to Programming

Discussion Section 3

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This discussion is being recorded

Lecture recap

- Classes
 - Combine simple pieces of data together into more complicated structures
 - For example, two integers can be used to represent a point in 2D space
- Constructors
 - It does not make sense to have a fixed x and y in the point class
 - We use constructors to create objects in the class
- Objects
 - Instances of the class
 - In many cases there are infinitely many objects
 - For example, the number of points is infinite

```
class Point {  
    int x;  
    int y;  
    Point(int x, int y) {  
        this.x = x;  
        this.y = y;  
    }  
    Point add(Point other) {  
        return new Point(this.x + other.x, this.y + other.y);  
    }  
}
```

Lecture recap

- int
- boolean
- String
- double
 - Floating point number
 - Use with caution
 - `double value1 = 1/2;`
 - `double value2 = 1.0/2;`
 - `double value3 = 1/2.0;`
 - `double value4 = 1.0/2.0;`
 - Not precise

Lecture recap

- Math library

- <https://docs.oracle.com/en/java/javase/15/docs/api/java.base/java/lang/Math.html>
- Lots of useful methods:
 - max/min
 - abs
 - pow
 - sqrt
 - log
 - ...

PA3

- Due next Wednesday at 11:59pm PST
- Lots of stuff going on. Seek help if necessary
- Start early!

Thanks!