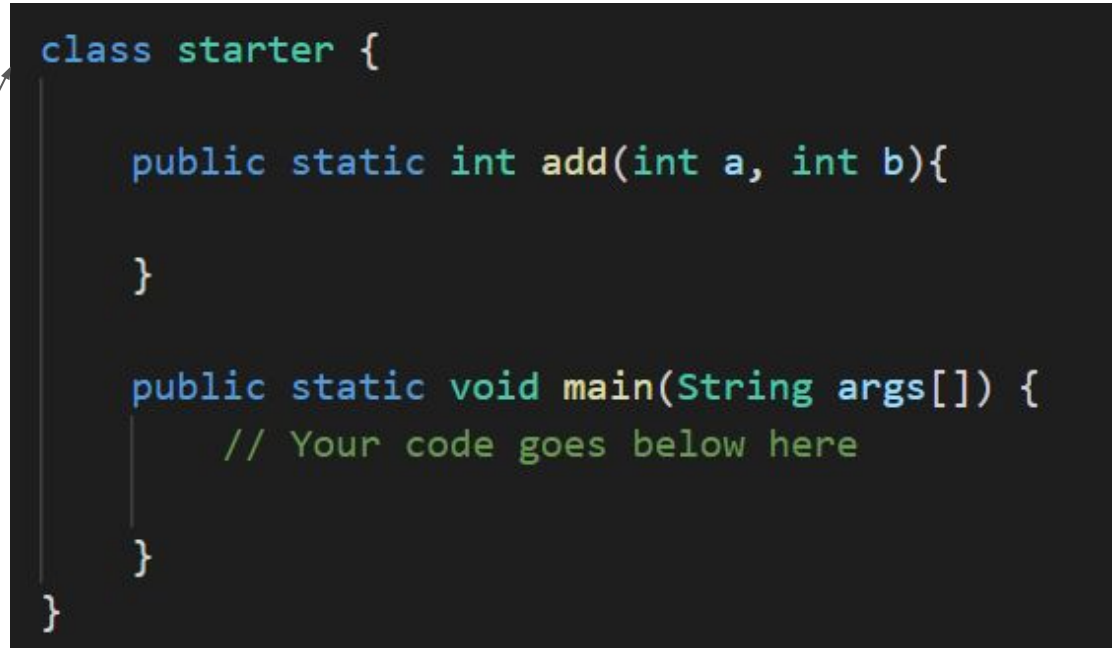
Classes

Java
Mr. Poole

Methods - Review

Methods do tasks that we want to happen multiple times.

But have we ever wondered what “class starter” does?



```
class starter {

    public static int add(int a, int b){

    }

    public static void main(String args[]) {
        // Your code goes below here

    }
}
```

Java - Object Oriented Programming (OOP)

Procedural programming is about writing procedures or methods that perform operations on the data, while object-oriented programming is about creating objects that contain both data and methods.

Object-oriented programming has several advantages over procedural programming:

- OOP is faster and easier to execute
- OOP provides a clear structure for the programs
- OOP helps to keep the Java code DRY "Don't Repeat Yourself", and makes the code easier to maintain, modify and debug
- OOP makes it possible to create full reusable applications with less code and shorter development time=

Java - Classes vs Objects

Java - Classes vs Objects

Example: Class vs Object

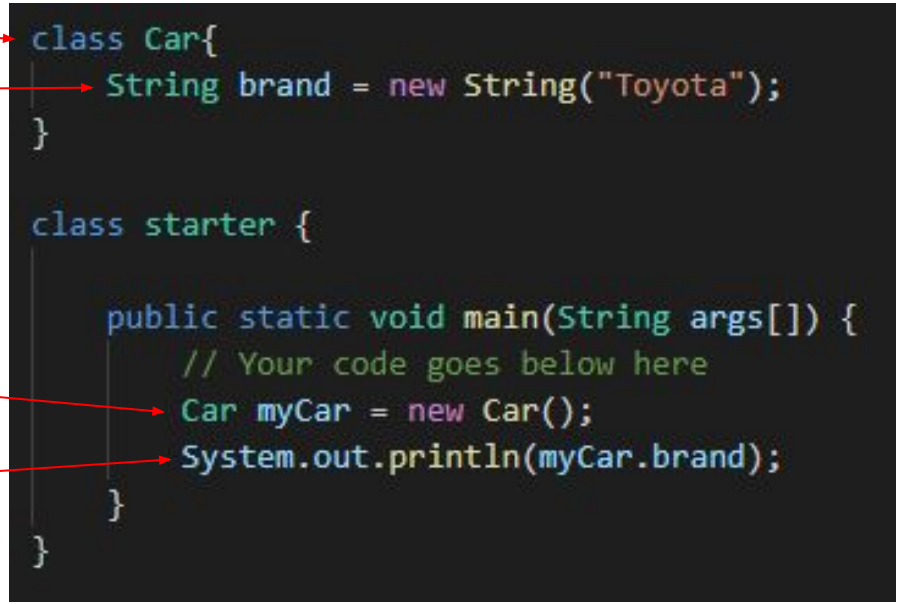
Car is the Class!

Car contains a String named “brand”

In our main method we can create a Car object!

We can also reference the Car brand!

Try it out!



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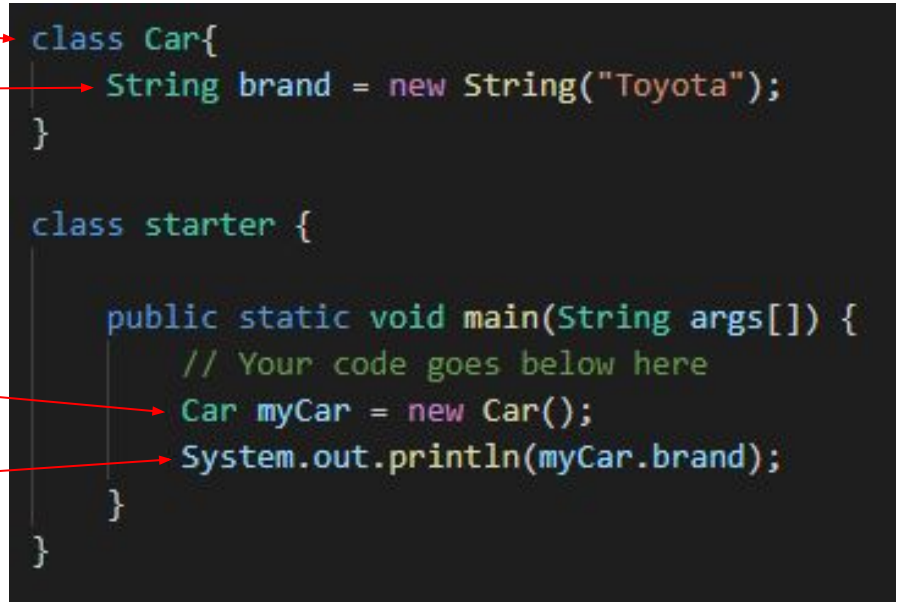

Lab - Classes

1. Create a “Character” class
2. The Character class should have a **String role**
    a. Role should contain either a Wizard, Warrior, or Rogue
3. Then create **5 integers** of each of the stats from lab 15
    a. Strength, Dexterity, Intelligence, Constitution, Charisma
4. For now, we can hard code values in.

Part 2

1. Create a Character object
2. Print out each of the stats given in the class.