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1 Classes and Instances - Lab

1.1 Introduction

Okay, you've learned how to declare classes and create instances in the last lesson. Now it's time to put these new skills to the test!

1.2 Objectives

In this lab you will:

- Create an instance of a class

1.3 Classes

You're about to create your first package with class definitions! You've already seen how to import packages such as NumPy and Pandas, and you can organize your own code in a similar manner. For example, once you define the `Ride` class in a file **ride.py**, you can then import said code in another notebook or script using:

```
[3]: # Import the entire file
     import ride

     # Import only the Ride class
     from ride import Ride
```

In addition to **ride.py** file, we also created another file **driver.py** that contains the `Driver` class. Import this class in the cell below:

```
[10]: # Import only the Driver class
      from driver import Driver
```

Create a `Passenger` class that doesn't contain anything in the following cell:

> Note: By convention, you should use CamelCase to name the class. Also, you can't create an "empty" class. At the least, you need to specify the pass keyword to ensure the class definition is syntactically valid.

```
[11]: # Create Passenger class
      class Passenger:
          pass
```

1.4 Instances

Now practice using these classes to create instances. First, make two instances of the `Passenger` class and assign them to the variables `meryl` and `daniel`, respectively:

```
[12]: # Two instances of the Passenger class
      meryl = Passenger()
      daniel = Passenger()

      print(meryl)
      print(daniel)
```

```
<__main__.Passenger object at 0x7f9817e98400>
<__main__.Passenger object at 0x7f9817e98550>
```

Next, make one instance of the `Driver` class and assign it to the variable, `flatiron_taxi`.

```
[13]: # One instance of the Driver class
      flatiron_taxi = Driver()
      print(flatiron_taxi)
```

```
<driver.Driver object at 0x7f9817e98430>
```

Finally, make two instances of the `Ride` class and assign them to `ride_to_school` and `ride_home`.

```
[14]: # Two instances of the Ride class
      ride_to_school = Ride()
      ride_home = Ride()

      print(ride_to_school)
      print(ride_home)
```

```
<ride.Ride object at 0x7f9817e5bbb0>
<ride.Ride object at 0x7f9817e5b8b0>
```

1.5 Summary

Great! In this lab, you were able to define classes and create instances of those classes.