CECS 220 Assignment #2

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To solve problem 1: Packages, first create a class called Address. Then create private variables streetAddress, city, state, and zipCode and set up setter and getter methods for the encapsulation. Next take all the variables in String datatype and add them into one formatted string with spaces for the toString method. Next, create a class named Package using private to create variables TrackingID, Weight, Cost, shipMethod, and Destination. Set up setter and getter methods for the variables for encapsulation. Now, create a shipMethod which has a enumerated type called Shipping which has Air, Ground, and Sea. The constructor for Package has a weight parameter, shipping method parameter, and contains the method calculateCost method which will calculate the cost of the package to be sent using weight and shipping type. Next, create a method called GenerateID which using a random class object to generate a random TrackingID number of 6 digits and returns an it. Create a toString method which will display the shipping info and cost which takes the variables and converts into strings and adds end lines which creates a new formatted string. Lastly, create a PackageDelivery class which allows users to create as many packages and takes user input for weight, shipping type, and destination using the scanner class. It then adds those to an array list named packageList and displays it with a while loop.

If enumerated type is entered in wrong.

```
<terminated> PackageDelivery [Java Application] C:\Program Files\Java\jre1.8.0_171\bin\javaw.exe (Jun 26, 2018, 9:32:10 PM)
2
Package Weight?
10
Shipping Method?
Exception in thread "main" java.lang.IllegalArgumentException: No enum constant ship.Package.Shipp
        at java.lang.Enum.valueOf(Unknown Source)
        at ship.Package$Shipping.valueOf(Package.java:1)
        at ship.PackageDelivery.main(PackageDelivery.java:23)
```

For problem 2: 100 Circles, create a class named Circles which will be a JavaFX application which means there will be a public void start, primaryStage, group, and scene. Import random class to create rand which will create random radiuses and positions. Create variables x and y which are set equal to rand (800 for x and 600 for y, for window resolution) and add 1 so the range will be from 1-800 for x and 1-600 for y. Radius of the circles with be set to 1 to 100. If the radius is above 50 it won't be filled but will instead be a black outline of a circle, else it will be a blue filled circle. Lastly, add the Circles to the group named root and add the group to the scene and set the scene of the primary stage, set the title, show it, and create a static void main which launches without ide.