Recitation Assignment 2 – Java Syntax
Partner assignment, demo to a TA before the end of recitation

Imagine you're studying abroad in Barcelona, Spain this summer and want to create a Java class called *Converter* that accomplishes three common tasks, figuring out the time of day back home, converting a temperature from Fahrenheit and Celsius, and calculating a dollar amount in euros.

- Create a static method called *toEST()* that accepts an integer from 1-24 that is the hour of the day in Barcelona and returns an integer that corresponds to the hour back home. Assume the time change is -6 hours. Make sure your code never returns a negative number and assume you are given a valid input.

- Create another static method called *toCelsius()* that accepts an integer and returns the temperature in Celsius as an integer (rounding is not necessary). Use the formula °C = (°F - 32) * 5/9.

- Next, create a constructor for the *Converter* class that accepts a double corresponding to the current dollar/euro exchange rate. Store that value in a non-static object variable called *exchangeRate* and write an object method called *toEuro()* that takes in a double that is a dollar amount and returns a double with the euro equivalence.

- Now write a main method to test your code. Pass the times 4 and 16 into your *toEST()* method and use the *toCelsius()* method to convert 56°F and 25°F to Celsius. Then, create an instance of the *Converter* class using 0.731 as the exchange rate. Convert $10 and $15.85 to euros. Print out the results like this:

```
4:00 in Barcelona is 22:00 in Atlanta
16:00 in Barcelona is 10:00 in Atlanta
56 degrees F is 13 degrees C
25 degrees F is -3 degrees C
10 US dollars is 7.31 euros
15.85 US dollars is 11.58635 euros
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Grading Criteria
- 4 pts - *main()* calls the three methods and outputs in the correct format
- 2 pts - *toEST()* returns correct time conversions
- 2 pts - *toCelsius()* returns correct temperature conversions
- 2 pts - *toEuro()* returns correct currency conversions using the object variable