Lab Golden Ratio   CSIS-1400

Learning Objectives:

- Formulate Algorithms

- Practice if statement

- Practice the use of methods to structure the code

- Practice the use of static methods from class Math

- Get familiar with the Golden Ratio

Instructions:

1. Know what the golden ratio is (understand the problem)

   Here are two resources that might be helpful

   Video: https://www.youtube.com/watch?v=fmaVqkR0ZXg

   http://www.mathsisfun.com/numbers/golden-ratio.html

2. Write a method called `isGoldenRatio.` Here is the method header:

   `private static boolean isGoldenRatio (double number1, double number2)`

   In order for 2 numbers to be considered a golden ratio the following has to be true:

   When I divide the larger number by the smaller number and I round the result to 3 digits, then this rounded result
   needs to be `1.618`

3. Write some code in `main` to test the method `isGoldenRatio`

   Declare 2 variables n1 and n2. Assign hard-coded values

   Call the method `isGoldenRatio` and pass n1 and n2 as arguments.

   Here are some things to consider:

- We do not know the order in which the user passes the numbers.

   number1 could be greater , equal, or smaller than number 2

- How can you round a double to three digits?

   Hint: Math.round(number) rounds a number to a whole number

- Recommendation:

   Write a pseudo code before you try to implement this algorithm