

Conditionals, Booleans and Strings

1. Rewrite the `getCoordinates` method below by factoring to eliminate redundancy. Your code must produce the same results (copy and paste it to start).

```
public static double getCoordinates(Scanner console) {
    System.out.print("x coordinate? ");
    double x = console.nextDouble();
    int neg;
    if (x < 0.0) {
        System.out.print("y coordinate? ");
        double y = console.nextDouble();
        if (y < 0.0) {
            neg = 2;
            System.out.println("negatives = " + neg);
            return x + y + neg;
        } else {
            neg = 1;
            System.out.println("negatives = " + neg);
            return x + y + neg;
        }
    } else {
        System.out.print("y coordinate? ");
        double y = console.nextDouble();
        if (y < 0.0) {
            neg = 1;
            System.out.println("negatives = " + neg);
            return x + y + neg;
        } else {
            neg = 0;
            System.out.println("negatives = " + neg);
            return x + y + neg;
        }
    }
}
```

2. Write a method named `numUnique` that takes three integers as parameters and that returns the number of unique integers among the three. For example, the call `numUnique(18, 3, 4)` should return 3 because the parameters have 3 different values. By contrast, the call `numUnique(6, 7, 6)` would return 2 because there are only 2 unique numbers among the three parameters: 6 and 7.

3. Write a method named `isAllVowels` that returns whether a `String` consists entirely of vowels (a, e, i, o, or u, case-insensitively). If every character of the `String` is a vowel, your method should return `true`. If any character of the `String` is a non-vowel, your method should return `false`. Your method should return `true` if passed the empty string, since it does not contain any non-vowel characters.

For example, here are some calls to your method and their expected results:

Call	Value Returned
<code>isAllVowels("eIEiO")</code>	<code>true</code>
<code>isAllVowels("oink")</code>	<code>false</code>