

## Do Now: Debugging Warm Up!

Here is a `GeoLocation` class that represents the latitude / longitude of a location as a point:

```
public class GeoLocation
{
    private double latitude;
    private double longitude;

    public GeoLocation(double lat, double lon)
    {
        latitude = lat;
        longitude = lon;
    }

    public String getCoords()
    {
        String coords = "(" + latitude + ", " + longitude + ")";
        return coords;
    }

    public void printCoords()
    {
        String coords = getCoords();
        System.out.println(coords);
    }
}
```

Raphael created a `Main` class as a client that uses the `GeoLocation` class. In the main method, he wrote the following code to create a `GeoLocation` object then print out its coordinates, as shown below:

```
public class Main
{
    public static void main(String[] args)
    {
        GeoLocation geo = new GeoLocation(14.0, 15.0);
        System.out.println(geo.printCoords());
    }
}
```

Raphael *expects* that the printed output will be

**(14.0, 15.0)**

But his code does not produce the expected result! He needs your help to debug his code.

2. Create a new IntelliJ project (LASTNAMEU2T6Lab, which you will also use for today's lab). **Copy/paste** the code for the two classes above into your IntelliJ project.
3. Try to execute the `Main` client code to see what actually happens.
4. Work with your partner to find **TWO** different ways to fix this problem that do **NOT** involve altering the code of `GeoLocation` class (only alter the code in the `Main` client class)

**Copy/paste your *two* different fixes as your answer to the Do Now question! Just copy/paste the line(s) of code you changed (not the entire runner class)**

**Label your two solutions (a) and (b)**

## SAMPLE SOLUTIONS

### First fix:

```
public class Main
{
    public static void
    main(String[] args)
    {
        GeoLocation geo
        = new GeoLocation(14,
        15);

        geo.printCoords();
    }
}
```

**printCoords is a void method, so it *cannot* be called "in line" as part of a print statement.**

### Second fix:

```
public class Main
{
    public static void
    main(String[] args)
    {
        GeoLocation geo
        = new GeoLocation(14,
        15);

        System.out.println(geo.g
        etCoords());
    }
}
```

getCoords is a non-void method which returns a value (in this case a String), so it can be called "in line" as part of a print statement

