**Studio: Area of a Circle**

Get cosy with Java syntax by revisiting one of our early Python programs. We'll create a console program that calculates the area of a circle based on input from the user.

**Creating your class**

Since you're still new to Java and IntelliJ, we'll provide some extra direction the first few times we go to write code.

Create a new package named org.launchcode.java.studios by right-clicking on the src directory in java-exercises and selecting *New > Package*. Be sure to enter the full name, or your package won't be created in the correct location.

Create your program/class in the java-exercises project within the package org.launchcode.java.studios by right-clicking on the studios package/folder and selecting *New > Java Class*. Enter the name Area.

**Your task**

Write a program/class Area that prompts the user for a number, and then calculate the area of a circle with that radius and print the result.

Recall that the area of a circle is A = pi \* r \* r where pi is 3.14 and r is the radius.

Here's an example of how your program should work:

Enter a radius: 2.5

The area of a circle of radius 2.5 is: 19.625

Some questions to ask yourself:

* What data type should the radius be?
* What is the best way to get user input into a variable radius of that type?

Be sure to create a main method to place your code within. It's signature *must* be:

public static void main(String[] args)

**Bonus Missions**

1. Add validation to your program. If the user enters a negative number, print an error message and quit. You'll need to peek ahead to learn about [conditional syntax in Java](https://education.launchcode.org/skills-back-end-java/java4python/control-flow/#conditionals).
2. Extend your program further by using a [while or do-while loop](http://docs.oracle.com/javase/tutorial/java/nutsandbolts/while.html), so that when the user enters a negative number they are re-prompted.