Programming Probability 1

Welcome to your first programming practice lesson!

These will be sprinkled throughout the Nanodegree. There are several purposes for these sections.

1. To practice programming and gain some understanding of Python (and later, C++), since these languages are the most prevalent in the field of self driving cars.
2. To apply the mathematics and robotics concepts you are learning. It's easy to *think* you understand a concept, but it's only when you can actually *use* that concept that you can really be sure.

Since students in this Nanodegree are coming from a variety of programming backgrounds, you may find these sections very challenging or very easy. It's up to you to allocate your learning time effectively!

These activities will all be labeled as **demonstrations**, **playgrounds**, or **exercises** and each has a different purpose.

Demonstrations

You shouldn't spend more than a few minutes on a demonstration. For a demonstration the goal is to quickly show you something with code. That "something" might be a concept in programming, robotics, math, etc... Generally the goal is to *expose* you to a concept (which you may already know). Don't try to memorize anything shown in a demo! That level of learning will happen naturally as you work with a concept in playgrounds, exercises, and projects.

When you get to a demonstration you should:

1. read through the code and comments.
2. come up with a hypothesis for what will happen when you press "Test Run"
3. press Test Run and observe the result. Compare what you see to what you expected. If there is a difference, it means there's an opportunity to learn something! take time to reflect on what was different and why.