**Simple Python Data Section 1**

**Python Reading**

Read [Simple Python Data](http://interactivepython.org/runestone/static/thinkcspy/toc.html) from *Variables, Expressions and Statements* through the section entitled *Variable Names and Keywords*.

**Checking Your Understanding (22 total pts)**

**Directions: Provide an answer for each question directly after the question on the copy of this document that you saved to your drive – please save it with the same name I have given it. When appropriate, you need to answer in complete sentences.**

      Watch: [Click, Baby, Click](https://www.youtube.com/watch?v=HNaCf_Fnp6E)

1. Give a definition for analytics?   Why are analytics important in today's world?

Analytics is the systematic computational analysis of data or stats. Companies use Analytics to see how they are doing and to make decisions on how to proceed.

1. Give an example of the string (str) type. Now give an example of the integer (int) type. Finally, give an example of the float type.

A string is a word like dog. An Integer is any real whole number like 45, and a Float is an any real number that can have decimals.

1. Why do we care about types?

We care about types because different types serve different purposes. Being able to utilize these can help increase the efficiency of the program.

1. How can you print the sentence *"She's from Cuba"* if you want all of the quote marks to show up?

You use triple quotes and put the double quotes in the inside.

1. Explain the difference between *print("hi", "there")* and *print("hi" + "there")*?

In the first example there will be a space between the two words but there will not be in the second example.

1. How can you convert 3.14 into a string? Into an integer? Into a float?

To convert 3.14 into a string you must type print(str(3.14)), to do an int you type print(int(3.14)), abd finally to convert to a float you type print(float(3.14)).

1. Give an example where using a variable in a Python program is helpful.

Using a variable is helpful in python when you want to store data for later use.

1. Explain how the assignment operator, =, works.

The = operator sets the value of a variable to whatever you make it.

1. Why might it a good idea to only use lower case letters in variable names?

You should use lowercase to name your variables because it will increase the readablility of them.

1. Why is it a good idea to make variable names meaningful? It is good to make variables meaningful because it complies to you and will make the process easier for you

That way you know what the variable does so you dot need a commnet describing its purpose. If you write a program with a lot of variables using genaric names can get confusing.

1. Give an example of an illegal variable name.

An illegal variable name could be KJASGFD6 87543#%$]\[] b dshfo54+(&\_)\*%#.