**Python Variables**

As I was reading more and more on python and trying to explore more what I learned is Python is very interesting language to adopt.

One of the main differences between Python and strongly-typed languages like C, C++ or Java is the way it deals with types. In strongly-typed languages every variable must have a unique data type. E.g. if a variable is of type integer, solely integers can be saved in the variable. In Java or C, every variable has to be declared before it can be used. Declaring a variable means binding it to a data type. In Python just like all languages has multiple types of variables that can be used including numbers (integers and floats), strings, and lists.

Declaration of variables is not required in Python. If there is need of a variable, you think of a name and start using it as a variable.

**Variables, expressions and statements**

In Python there is no Double, BigInt and Long etc. It accomplish everything in basic datatypes int, str, float.

What I observed is, all variables are stored in constant pools.

Ex- As soon as you do some operation on it it will change the id().

**Python Variable Naming Rules -** Variable names can contain only letters, numbers, and underscores. They can start with a letter or an underscore, but not with a number. Spaces are not allowed in variable names. Don’t use the Python keywords.

**Operators and operands**

**Operators** are special tokens that represent computations like addition, multiplication and division. The values the operator uses are called **operands**.The operators +,-,\*,/,\*\* perform addition, subtraction, multiplication ,division and exponentiation.

**Order of operation:**

Python follows the same precedence rules for its mathematical operators that mathematics does. When more than one operator appears in an expression, the order of evaluation depends on the **rules of precedence**.

The acronym PEMDAS is a useful way to remember the order of operations:

P- **P**arentheses have the highest precedence

E- **E**xponentiation has the next highest precedence

**M-M**ultiplication and both **D**ivision operators have the same precedence, which is higher than **A**ddition and **S**ubtraction, which also have the same precedence

Operators with the *same* precedence are evaluated from left-to-right.

There are also other operators like modulus operator which works with integer however interestingly there are string operators as well.+ operator works with string but not for addition, its works with string concatenation.Another operator \* which multiplies the content of string by integer. For example, 'Fun'\*3 is 'FunFunFun'.

**The Style Guide for Python Code**

I am impressed by style guide provided by python as well as best practices of coding. This gives clear picture of, what kind of roller coster it will be to learn the Python. If you are already familiar with Java or other language the It will little foolish or unexpected.

**Python is strictly follow the code layouts-**

To make a readable, Ex- Long names of functions with many parameters it might go out of the screen and makes difficult to read. Follow the proper indentation to fit the code in screen so that it will be more readable. With improper indentation python gives error.