Python Lessons

Introduction:

- ✓ Python is a popular programming language.
- ✓ It was created by "Guido Van Rossum".
- ✓ Python programming language was released in year 1991.
- ✓ It is used for: web development, software development, mathematics and system scripting.

Uses:

- ✔ Python can be used with Database Systems.
- ✔ Python can also read and modify files.
- ✓ Python can be used to handle big data and perform complex mathematics.
- ✔ Python can be used for repaid prototyping or for production ready software development.
- ✔ Python can be used alongside software to create workflows.
- ✔ Python can be use on server side to create web applications.

Why to Choose Python:

- ✓ Python works on many platforms. Like Windows, Mac and Linux.
- ✔ Python has a simple syntax similar to English language.
- ✓ Python executes on interpreter system, it means that code be executed as they have been written.
- ✓ Python has syntax that allows developers to write the program with fewer lines than some other programming languages.
- ✓ Python can be treated in procedural way, an object oriented way and or a functional way.
- ✓ It is possible to write python code by using Integrated Development Environment (IDE).
- ✓ Some of the popular Python IDEs are: <u>PyCharm</u>, <u>Eclipse</u> and <u>Netbeans</u>.
- ✓ Python was designed for readability, and has some similarities to the English language with influence from mathematics.
- Python relies on indentations, using white-space to define scope such as scope of loops, functions and classes, other programming languages often use curly brackets for this purpose.
- ✓ Python uses new line to complete a command as opposed to other programming languages which often use semicolons or parentheses.

Python Syntax:

- ✓ Python syntax can be executed by writing directly in the command line.
- ✓ Python syntax can also be executed by creating a python file on the server.
- ✓ Using the *.py extension and executing on the command line.
- ✓ Indentation refers to the spaces at the beginning of the code line.
- ✓ In other programming languages the indentation in code is for readability purpose.
- ✓ The indentation in python is very important.
- ✔ Python uses indentation to indicate a block of code.
- ✓ Python will display an error if you forgot the indentation in the block of code.
- ✓ The number of spaces has to be at least one space.
- ✓ You have to use same number of spaces in the same block of code otherwise python will give you an error.

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Python Variables:

- ✔ Variables are created when you assign a value to it.
- ✔ Python has no command for declaring a variable.

Python Comments:

- ✔ Python comments starts with (#) symbol.
- ✓ After (#) symbol every line of code will be turned into python comments.
- ✓ Python has commenting capability for the purpose of in-code documentation.
- ✓ Comments can be used to explain Python code.
- ✓ Comments can be used to make the code more readable.
- ✓ Comments can be used to prevent execution when testing code.
- ✓ Comments can be placed at the end of a line, and Python will ignore the rest of the line.
- ✓ A comment does not have to be text that explains the code, it can also be used to prevent Python from executing code.
- ✔ Python does not have really a syntax for multi-line comments.
- ✓ To add a multi line comment you could insert a (#) hash for each line.
- ✓ You can also use multiline string.
- ✔ Python will ignore string literals that are not assigned to string variables.
- ✓ You can add a multiline string (""") triple quotes in your code.
- ✓ As long as the string is not assigned to a variable, Python will read the code, but then ignore it, you have made a multiline comment.

Continue From Python Variables: https://www.w3schools.com/python/python variables.asp

Python Lessons

Refs:

Python Files: https://www.w3schools.com/python/python file handling.asp
Python Mysql: https://www.w3schools.com/python/python mysql getstarted.asp

