Introduction to Python

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University of South Florida
Tampa, Florida

2018

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- Opportunities in Python.

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- It is relatively terse compared to other languages and requires comparatively a few lines of code that could take more number of lines of code in other languages to solve a similar problem.
- Python is currently being used in multiple areas of computer science such as web development, machine learning, Neural networks and also in Quantum computing.

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- Python interpreters are becoming faster and newer implementations such as "PyPy" are faster than the CPython implementation.

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- Some of the most prominent changes seen in Python 3 are the print statement, string formatting, and use of the Unicode Standard for text data.

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- We have performed the first ritual of saying "Hello World!!" to our fellow programmers.

Anaconda and Jupyter

We will be practicing all the exercises on Jupyter Notebooks and we recommend that you have an Anaconda distribution installed on your machine before we go ahead. Here are a few useful links.

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- The material for the discussion is available at `https://github.com/vivek14632/Python-Workshop`

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- You have written your first Python code on Jupyter Notebook now.

Contd..

The following are some of the features of Jupyter Notebook.

- In the drop down menu that reads "Code", we have other options such as
  - Code - To write executable code.
  - Markdown - To write text and explanations for the code.
  - Raw NBConvert - NB stands for NoteBook and it is used to present the content as it is without being modified.
  - Heading - Convert Text to heading.
  - For further detail on file format, please check `https://ipython.org/ipython-doc/3/notebook/nbformat.html`
- Start and stop program (interrupt kernel and play buttons)
- Save program in different formats (.ipynb,.py,.html)
- Run previously written python script
- Select python version from our different environments.
- To terminate Jupyter Notebook, we say CTRL+C/Cmd + C on the prompt.