**PYTHON GUIDE**

**Are you trying to learn Python but aren’t sure how to go about it?**

**Let’s do a checklist: Have you succeeded in doing the following things in Python?**

* Have you managed to **download** python to your computer?
* Have you managed to run a **hello** **world** script?
* **Have you learnt Python Basics?**
  + Have you learnt how to find the **complexity** of a script?
  + Have you learnt **variables** and **scope** of a variable?
  + Have you learnt **keywords** and **operators**?
  + Have you learnt about **statements** and **indentation**?
  + Have you learnt how to make **comments** and **documentation**?
  + Have you learnt **Control** **Flow**?
    - **Looping**
      * While
      * For
    - **Conditions**
    - Break, continue, pass
  + Have you written a script that manages to do something? (Check for palindrome, Fibonacci sequences, etc.)
  + Have you learnt how to use **modules** and **libraries**?
  + Have you learnt how to **make** **libraries**?
  + Have you learnt how to install packages using **pip**?
  + Have you written codes that contains **methods**?
  + Have you written codes that contains **classes**?
  + Have you leant how to do **exception** **handling**?
* **Have you written codes that contain functions?**
  + **Parameter**, **Argument**
  + \***args** and \*\***kwargs**
  + **Yield**
  + **Generators**
  + **Lambda**
  + **Decorators**
* Have you learnt **constructors** and **destructors**?
* Have you learnt **inheritance**?
* Have you learnt **encapsulation**?
* Have you learnt **RegEx**?
* Have you learnt **collections**?
* **Have you learnt Python Intermediate?**
  + Have you learnt **metaprocessing**?
  + Have you learnt **abstract** **classes**?
  + Have you learnt **multithreading** and **multiprocessing**?
  + Have you learnt about **sockets**?
* Have you written codes that consists of **multiple** **files** **referencing** one another?
* Have you used codes with **web** **framework**?
* Have you learnt working with **JSON** files?
* Have you learnt working with **CSV** files?
* Have you learnt how to store data in **database**?
  + Offline
  + Web
* Have you learnt how to make **executable** files?
* Have you learnt Python **GUI** toolkits?
* Have you learnt how to make **cross** **platform** applications?
* Have you managed to make bots using **automation** libraries?
* Have you learnt how to do **web** **testing**?
* Have you learnt how to use important modules like os, time, sys, math, numpy, scipy, etc.
* Have you learnt how to put spreadsheets data in **dataframe**?
* Have you learnt **data** **visualization**?
* Have you managed to **integrate** the steps mentioned above into one project and **create** an **application**?

*{****Additional:*** *Try* ***ML*** *in Python}*