Python: Level - 1

|  |  |  |  |
| --- | --- | --- | --- |
| **Week 1**   * Intro to flowchart * Intro to programming * Basic print commands * Input through interactive mode | **Week 2**   * Basics of python * Different fields python used, Applications * Installation * Intro to pycharm | **Week 3**   * Basics of syntax * Variables, types * Finding squares, cubes, square roots | **Week 4**   * Basics of python operations * Operations * If else, Decision Making * Given a number find whether divided by 2, 3 or 6 |
| **Week 5**   * Loops : while, for * Simple staircase printing * Given a 2 digit number AB is it greater than A power B | **Week 6**   * Nested Loops * progressions, series * area to circumference radius * Calculate n! | **Week 7**   * Strings, numbers * Functions * Trigonometric functions | **Week 8**   * Lists * Min Max sum in series |
| **Week 9**   * Tuples, Dictionary * Key value pairs * JSON introduction | **Week 10**   * Using modules * Stats * Plotting graphs | **Week 11**   * Working on files I/O * Numpy, Pandas, Matplotlib | **Week 12 : Start Project (TBD)**   * *Currency converter app* * *Use Datetime module to give at any* |

Things to be included

* Basics: string, understanding data structures, functions, data manipulation, etc.
* Libraries: Numpy, Pandas, Matplotlib.
* Type conversion

**Level - 2 :**

Git cloning of other simple projects

Matrix multiplication

**Level - 3** :

Building API’s using python