**Lesson4**

Curriculum overview:

1. Chapter one: Start here
   * Understand how course work
   * What is programing
   * Why you should learn python
   * Curriculum overview
2. Chapter two: Python setup
   * Command line basics
   * Install python step by step mac
   * Install python step by step windows
   * Running python in command line
   * Running python in vs code
3. Chapter three : Intro to python
   * Hello world
   * Comments
   * Data types
   * Variables
   * Numbers
   * Casting
   * Strings
   * Booleans
   * Operators
   * Lists
   * Tuples
   * Sets
   * Dictionaries
   * If condition
   * Else
   * Break and Continue
   * Mini-project
4. Chapter four : go deep
   * For loop
   * While loop
   * Methods and Functions
   * Arrays
   * Milestone project
5. Chapter five: intermediate level • Classes

• Objects  
• Inheritance • Iterators

* Scope
* Modules

Ø Numpy

* + Ø  Pandas
  + Ø  Scipy
  + Ø  Django
* Dates
* Math
* User input
* String formatting
* Pip
* Try and except
* Milestone project 2

1. Chapter six: file handling
   * File handling
   * Read files
   * Write /create files
   * Delete files
2. Chapter seven: Important library(Matplotlib)
   * Intro
   * Pyplot
   * Plolting
   * Markes
   * Line
   * Labels
   * Grid
   * Subplot
   * Scatter
   * Bars
   * Histograms
   * Pie charts
3. Chapter eight: advanced topics • Decorators

• Generators

1. Chapter nine: advanced applications
   * Web scraping
   * Intro to machine learning
   * Intro to deep learning
   * Build simple neural network
   * GUI
   * Email automation
   * Web app using flaske

So What you will learn:

* Programming with Python
* Object oriented programming with Python
* Data Visualization (MatPlotLib)
* Data Science (Numpy, Pandas, Scipy)
* WebScraping (Requests, Selenium)
* Neural Networks (TensorFlow)
* Email Automation
* Web application/Backend (Flask)