PYTHON || Data Science

Week 1 - Python and basic programming fundamentals

* Includes Logic Building
* How to code for real time applications
* Python – fundamentals
  + • Hello, World!
  + • Variables and Types
  + • Lists
  + • Basic Operators
  + • String Formatting
  + • Basic String Operations
  + • Conditions
  + • Loops
  + • Functions
  + • Classes and Objects
  + Real time problems with each concept

At the end of Week 1 students will have to solve a real life interesting scenario.

Week 2 – Python Developer Career

* Must know Packages to Become a Full time Python Developer
* Free Lance Projects from My Github – Shared and Explained
* Modules
  + OpenPyxl
  + Pygame
  + Selenium Webdriver
  + Scrapy
  + Beautiful Soup

Week 2 & 3– Data Science

* Introduction
* Various Packages – (Hands on)

Numpy

MatPlotLib

Dictionaries

Pandas

Statistics

Data Visualisation

Data Cleaning Techniques

Case Study

Week 4 – MACHINE LEARNING

* What is Machine Learning
* Supervised Learning
* Unsupervised Learning
* Model and cost function
* Parameter Learning
* Gradient Descent
* Gradient Descent Intuition
* Linear Algebra Review