**Day 1 - What is Programming and Python?**

**What is Programming**

Programming is a way for us to tell computers what to do. Computer is a very dumb machine and it only does what we tell it to do. Hence, we learn programming and tell computers to do what we are very slow at - computation. If I ask you to calculate 5+6, you will immediately say 11. How about 23453453 X 56456?

You will start searching for a calculator or jump to a new tab to calculate the same. These 100 days of code series will help you learn python from starting to the end. We will start from 0 and by the time we end this course, I promise you will be a Job ready Python developer!

**What is Python?**

* Python is a dynamically typed, general purpose programming language that supports an object-oriented programming approach as well as a functional programming approach.
* Python is an interpreted and a high-level programming language.
* It was created by Guido Van Rossum in 1989.

**Features of Python**

* Python is simple and easy to understand.
* It is Interpreted and platform-independent which makes debugging very easy.
* Python is an open-source programming language.
* Python provides very big library support. Some of the popular libraries include NumPy, Tensorflow, Selenium, OpenCV, etc.
* It is possible to integrate other programming languages within python.

**What is Python used for**

* Python is used in Data Visualization to create plots and graphical representations.
* Python helps in Data Analytics to analyze and understand raw data for insights and trends.
* It is used in AI and Machine Learning to simulate human behavior and to learn from past data without hard coding.
* It is used to create web applications.
* It can be used to handle databases.
* It is used in business and accounting to perform complex mathematical operations along with quantitative and qualitative analysis.

**Why Replit?**

* Replit is very easy to share tutorials and code.
* You can easily fork this repl and continue learning in your own style. Video, code as well as text tutorial on the same page which makes things easy!
* For fellow teachers out there, you create a. tutorial folder to create tutorials using replit.