Live on 23/Feb/2019: How to code effectively
and
Build a simple web scraper

1. Announcements:
    a. Very happy to see our students build chatbots using Rasa, DialogFlow and end-to end conversation engines after our last live session.
    b. Sorry for a Saturday event. We will have this on Sundays in most cases.
    c. We will have a new website in the next week. We will announce downtime during night hours IST. Please cooperate.
    d. New slack channel to report bugs and improvements to the website so that our TechTeam can fix them.
    e. We will put up our live sessions on the desktop app (for registered students) 24 hrs after the completion of the live session for those folks who missed it.
2. How to code effectively:
    a. Prerequisite: Knowledge of Python
    b. Objective: Break down a problem, Learn to learn, Don't fear new libraries, Experiment, Search and Learn
    c. Simple Problem-1: Find if a number is prime?
        i. Write the logic using conditions, loops & recursion by breaking down the problems into smaller components
        ii. Write the code.
        iii. Debug by printing the variables in loops/recursion to understand the code better.
    d. Problem 2: Print the frequencies of each number.
        i. Logic
        ii. Code
        iii. Debug
    e. Practice, Practice and Practice:
       https://www.geeksforgeeks.org/python-programming-examples/
    f. Read others code to learn good programming practices. But, you can't escape writing your own.
    g. Writing optimized code would need you to understand DS and Algos.
3. Build a simple web scraper
    a. What is a web-scraper?
    b. Use APIs if the website provides you one.
    c. Simple Static System:
        i. Logic
        ii. HTML: https://www.w3schools.com/html/
        iii. DOM: https://en.wikipedia.org/wiki/Document_Object_Model
        iv. Don't be afraid to learn new libraries and methods.

   v. Beautiful Soup.
   vi. Sample Code:
     https://medium.freecodecamp.org/how-to-scrape-websites-with-python-and-beautifulsoup-5946935d93fe

 d. Dynamic websites:
   i. What is the problem with the earlier system?
   ii. Simulate a browser and get results.
   iii. Selenium: Just a bunch of functions and classes.
   iv. Code sample:
     https://medium.freecodecamp.org/better-web-scraping-in-python-with-selenium-beautiful-soup-and-pandas-d6390592e251