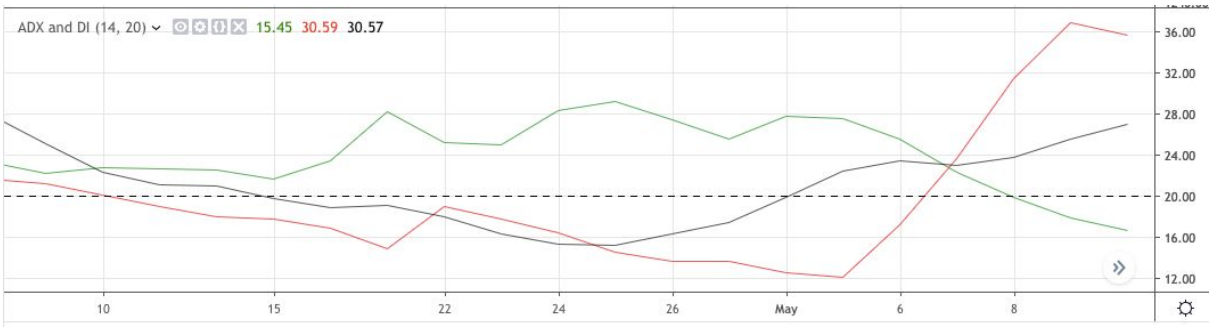
Exercise 1

As part of identifying profitable trading strategies, traders monitor various kinds of technical indicators. In this assignment, you will be implementing one such Indicator - ADX

1. The attached file(assignment1-data.csv) has the necessary data. Open, High, Low, Close values.
2. File (assignment1-Solution.xlsx) contains computation for ADX highlighted in yellow columns. Press F2 to know the formulas for each of the columns.
3. You are required to build a simple Django application which will have the following features:
    1. The index page will have a file uploader through which the user will upload the input csv file (assignment1-data.csv for this test)
    2. You need to perform all the relevant calculations (based on the formulae in assignment1-solution.xlsx file)
    3. The visualizations (refer below) will be displayed on the next page along with a "Download Output" button
    4. Upon clicking the "Download Output" button, a csv file be downloaded which will contain the solution (which should match with assignment1-Solution.xlsx)

Visualization guide

1. The visualisation to show the results on the graph plotting ADX, +DI and - DI columns of your solution as shown below.



(this is for illustration only and does not reflect actual solution data)

Submission Guidelines:

1. You are free to use any kind of UI templating tool (Bootstrap, JqueryUI, etc) to roll out your application quickly
2. You are free to use any kind of Python, Javascript, etc library to build your solution.
3. We will run your code in our system for evaluation. So please make sure that the pip "requirements.txt" file is present in your code submission. We will be using virtualenv to install the requirements mentioned in your "requirements.txt" file.
4. We are going to run your code on a Python 3.6 interpreter. Your entry may be disqualified if we are unable to execute your code, i.e., on a Python 3.6 interpreter in a virtualenv
5. You are encouraged to add README.MD file in case you feel the need of it
6. You need to make your submission via Github repository (or any other Git repository of your choice). Any other form (emailing, file sharing, etc) of code submission will be ignored.
7. Also note that we are only going to pull the "master" branch of the shared code repository. Other branches will be ignored. Thus we expect you to keep your "master" branch up-to-date.

8. To make a submission, share your Github public repository link through your job portal messaging app (Cutshort/linkedin) or by email to vagaram@inuvest.tech.

In case of any queries or clarifications, do not hesitate to reach out us.

Happy Coding!