Project Report on

STOCK PREDICTION

by

Patel Pranav Girishbhai

Registration No: 11701217
Roll No: 05
Section: KM028
Course: INT247

LOVELY PROFESSIONAL UNIVERSITY

Submitted to: Usha Mittal Ma'am

School of Computer Science Engineering
Lovely Professional University, Jalandhar

April-2020

Introduction

Prediction of stock market is a long-time attractive topic to researchers from different fields. In particular, numerous studies have been conducted to predict the movement of stock market using machine learning algorithms such as support vector machine (SVM) and reinforcement learning. In this project, I propose a new prediction algorithm that exploits the temporal correlation among global stock markets and various financial products to predict the next-day stock trend with the aid of RNN(Recurrent Neural Network).

The same algorithm is also applied with different regression algorithms to trace the actual increment in the markets.

How to test?

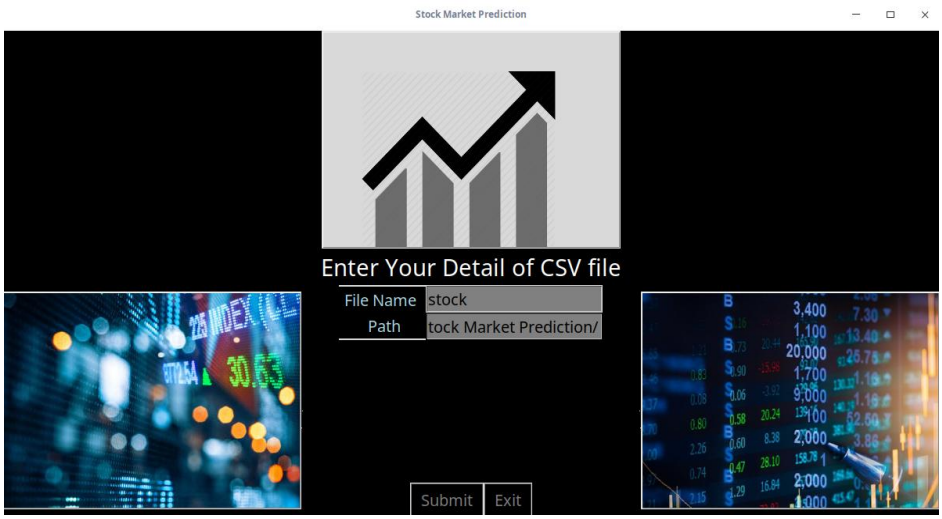
*** The necessary libraries needed to test the code are:**

1. Numpy
2. Pandas
3. Matplotlib
4. Keras
5. Tenserflow
6. Tkinter
7. Sklearn
8. PIL

* After that open the jupyter notebook “2. Implementation code.ipynb”

* Then run the code

* A small window will open over your jupyter notebook as shown below:



* Here the file name and path is asked but as it is not dynamic and not a real time for now enter “stock” (which is csv file name of dataset which is used for the project) as shown in picture.

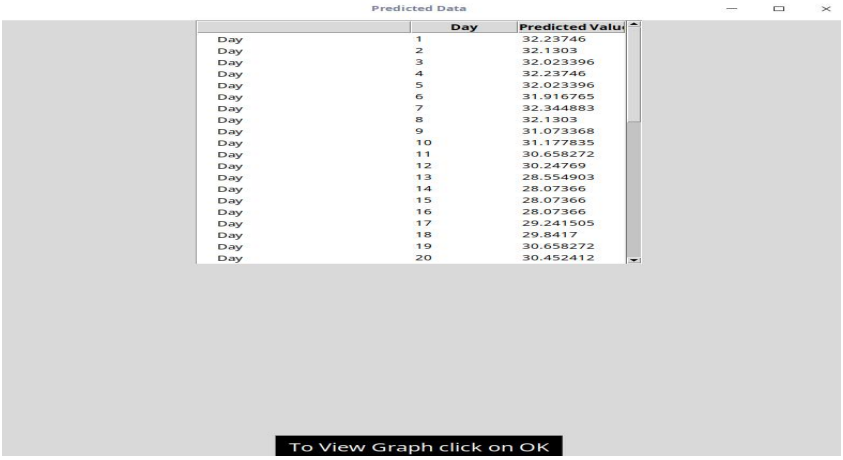
I have validate only file name so type only “stock” and for now you can enter anything in

path box.

* Then Click submit.

Note: It will take some time because of the time taken by the system to train the model.

* Then a new window will get open which shows the predicted value for the next 50 days (as shown below)



* Now click on the button “To View graph click on Ok”

*Then it will show the graph of:

Actual Values: Blue color

Train Value predicted: Yellow

Test value predicted: Green