<u>Solution Sheet</u>

1. Which model have you used for stock price prediction? Explain your model.

   The dataset for "Stock Price Prediction" is a labeled data, so it's a supervised learning problem and the output for our model must be a number i.e "Stock Price", so it's a regression problem.

   By analysis I have decided to use an Linear regression model using Scikit-Learn libraries. Also for increasing the accuracy of the prediction, I thought about Ensembling technique.

   So for the second model, I came up with Linear Kernel SVM model because our dataset has a large number of features like Stock Index, Index, Industry, VWAP, General Index, NAV,P/E Ratio, Volumes Traded, Inventory Turnover,   Covid Impact (Beta), Tracking Error, Dollar Exchange Rate,
   Put-Call Ratio, P/B Ratio, Stock Price.

So, I have implemented Average Ensembling technique using Linear Regression and Linear Kernel SVM Models for predicting the Stock Price.

2. Which model have you used for Put-Call ratio Time series prediction? Explain your model.