**Project preparations**

1. You will have to prepare a project report with the following content:
   1. Table of content
   2. Table of figures/graphs
   3. Abstract
   4. Chapters (Introduction, Software-libraries used, Mathematics etc.)
   5. Conclusion
   6. Complete code
   7. Font style: Times New Roman
   8. Font size: Chapter heading: 16 (bold), Topics: 14 (bold), content: 14
   9. Margin: 1” on all sides
   10. The front page will contain the logo of your college and the company.
2. You will have to prepare a presentation of each individual candidate, explaining their parts in the project and will have to present it.
3. The report will be submitted to us and your respective college. In the companies copy the reports will be submitted in my name:

Gurvansh Singh

M.Tech

Knowledge Solutions India

1. Time period for the project is 10 days, the code file should also be submitted.

**Project – 1**

**Admission Prediction**

This dataset is created for prediction of Graduate Admissions from an Indian perspective.

Content

The dataset contains several parameters which are considered important during the application for Masters Programs.  
The parameters included are :

1. GRE Scores ( out of 340 )
2. TOEFL Scores ( out of 120 )
3. University Rating ( out of 5 )
4. Statement of Purpose and Letter of Recommendation Strength ( out of 5 )
5. Undergraduate GPA ( out of 10 )
6. Research Experience ( either 0 or 1 )
7. Chance of Admit ( ranging from 0 to 1 )

Create a ML models to predict the ‘Chance of Admit’ with minimum MSE and RMSE and maximum R-Square score. Build the following models:

1. Multiple linear regressor (MLR)
2. Random Forest Regressor (RFR)
3. MLR with PCA
4. RFR with PCA

Plot the actual and predicted values for all the four models and plot the most significant features (output of PCA) against the output y\_pred. Also write an inference on the models you prepared.