**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, Algorithm etc.)
   5. Conclusion
   6. Font style: Times New Roman
   7. Font size: Chapter heading: 16 (bold), Topics: 14 (bold), content: 14
   8. Margin: 1” on all sides
   9. The front page will contain the logo of your college and the company - Knowledge solutions India.
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 (if they ask) . In the companies copy the reports will be submitted in my name:

Pranav Jaipurkar

M.E.

Knowledge Solutions India

1. **Time period for the project is 3 weeks, the code file should also be submitted. And one submission per group.**
2. **In the submission email mention your batch no. 13, your group no. and the names of your teammates.**

**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 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.