**ABC Healthcare Business Problem**

ABC healthcare is a leading diabetic drug development company in india.Developning a drug from molecule takes an average of 10 years. Drug development phase involves molecule identification, drug formulation, testing of drug on animals in lab,human testing,advorce event analysis, health regulatory approval.These drug development phases are long time consuming process and huge cost involvement and also risky.Making a new drug from existing drug is less time consuming and cost effective. Based upon performance of drug in market researchers find additional molecules to make new drug. Insurance data, hospital data, medicine store data, lab test data are good sources of data to measure drug performance in market.

ABC healthcare collected market data and wants a model which can predict cure status. Patient demographic,drug data are recorded for 1400 patients. Data dictionary and patient data are present in "diabeticdata.xlsx". Make a CART model to predict "cure status".

Data File : diabeticdata.xlsx (data secription : "Data\_dictionary" sheet, data in " Data" sheet)

Steps to be followed

1. Explore data as many as possible

2. Missing value treatment and redundant value treatment

3.Splitting of data for train,test

4.model building and prediction

5. model evaluation(confusion matrix,Roc curve,KS)

Questions to be Answers:

1. Which are important variables

2. Do you think knn imputation model better performs than mean imputation.