# **Classification Assignment**

### **Problem Statement or Requirement:**

A requirement from the Hospital, Management asked us to create a predictive model which will predict the Chronic Kidney Disease (CKD) based on the several parameters. The Client has provided the dataset of the same.

1. Identify your problem statement

We have to predict whether the patient will have Kidney disease.

Stage1: Machine Learning

Stage 2: Supervised

Stage 3: Classification

2. Tell basic info about the dataset (Total number of rows, columns)

#### Column:25

Row:399

3. Mention the pre-processing method if you're doing any (like converting string to number – nominal data)

Yes, we do One hot encoding for columns Sg, rbc, pc, pcc, ba, htn, dm, cad, appet, pe, ane, classification.

#### 4. Models

Classifier	F1 score
SVM	0.99
Decision tree	0.96
Random forest	0.99
Logistics	0.99
KNN	0.94
Navie Bayes-Gaussian	0.98
Navie Bayes-Categorical	100
Navie Bayes-Complement	0.82
Navie Bayes-Multinominal	0.82
Navie Bayes-Bernoulli	0.94

## 5. Model we have chosen.

Navie Bayes Categorical shows 100 % however we haven't splitted the Train\_test\_split instead we have given direct independent and dependent.