**Mini Project Title : Predictive Analysis on Chronic Kidney Disease**

**Aim**

To build a Predictive model on Chronic Kideny Disease, Using attributes collected from the hospital for nearly 2 months of period.

**Objectives**

The main objectives of project are

1. To predict whether the patients will suffer from Chronic Kidney disease or not accourding to Age group ( i.e Children, Youths, Aged people).

2. How this Chronic Kidney disease can be controlled by taking intresting variable in the given data sets and how measures can be take.

**Methodology**

1. Data is Pre-processed with imputing mean value for Missing values(NA).

2. Finding Corelation with target variable “Class”. As data sets contains both numerical and nominal data type,so that finding corelation between numerical data type by using R- function [cor()] and nominal data type with Chi-square test by each and every response variable with Predictive variable.

3. Once Corelation is found, next step is to divide the datasets into Train and Test data.

4. Fitting two to three models and evaluating those models to find better accuracy. Here will use second part of the data (i.e test data) to determines the precision in the choice of the algorithm based on the outcome.

**Machine Learning Algorithms** – Logistic Regression, Decison Tree, KNN classification

**Programming Language** – R

**Libraries** – MICE, rpart, caret , PARTY (ctree) function.