**HEART DISEASE PREDICTION**

Heart disease is a major threat for the life of human being. Coronary artery disease known as “heart disease” which is caused by cholesterol and calcium builds up inside the coronary arteries, which causes reducing the blood flow to the heart muscle. This process starts in childhood and slowly progresses based on many different risk factors such as diabetes, tobacco use, hypertension, high cholesterol and genetics. Once a severe blockage develops it may cause chest pain or discomfort can occur which is called "angina". Data Mining is the way toward extracting interesting patterns and knowledge from huge amount of information by utilizing distinctive medical profiles such as sex, blood pressure, age, hypertension, cholesterol, blood sugar etc. It can find the probability of patients getting a coronary illness. The diagnosis and grading of coronary illness are usually carried out based on the large volume of multi-structured patient data generated from the clinical reports, doctor's notes, and wearable body sensors. The analysis of healthcare parameters and the prediction of the subsequent future health conditions are proposed. Data mining techniques are used for predicting the probability of getting heart diseases. The classification techniques such as CNN, Naïve Bayes and SVM are used to predict categorical class labels. The proposed system has analysed prediction for heart disease using number of input attributes and to predict the likelihood of patient getting a heart disease. The computations are performed and compare the results in both python and R programming.