PROBLEM STATEMENTS

1) The major challenge in heart disease is its detection. There are instruments available which can predict heart disease but either it are expensive or are not efficient to calculate chance of heart disease in human. Early detection of cardiac diseases can decrease the mortality rate and overall complications. However, it is not possible to monitor patients everyday in all cases accurately and consultation of a patient for 24 hours by a doctor is not available since it requires more sapience, time and expertise. Since we have a good amount of data in today's world, we can use various machine learning algorithms to analyze the data for hidden patterns. The hidden patterns can be used for health diagnosis in medicinal data.

2) Heart disease can be managed effectively with a combination of lifestyle changes, medicine and, in some cases, surgery. With the right treatment, the symptoms of heart disease can be reduced and the functioning of the heart improved. The predicted results can be used to prevent and thus reduce cost for surgical treatment and other expensive. The overall objective of the work will be to predict accurately with few tests and attributes the presence of heart disease. Attributes considered form the primary basis for tests and give accurate results more or less. Many more input attributes can be taken but our goal is to predict with few attributes and faster efficiency the risk of having heart disease. Decisions are often made based on doctors' intuition and experience rather than on the knowledge rich data hidden in the data set and databases. This practice leads to unwanted biases, errors and excessive medical costs which affects the quality of service provided to patients.

3) Heart Attack is one of the huge health risks for human's healthy life, big data growth in medical and healthcare association today, early solution and accurate analysis of medical data benefits through patient care and community services. If the quality of medical data some data are incomplete, the accuracy of the analysis decreases. Design and Implement the Heart Attack Prediction and Detection System using machine learning techniques.

4) The rate of heart diseases is increasing at an exponential rate. The busy lifestyle of people in this era with all the fast food in the lunch break and getting back to sitting and working has pushed as over the edge. Along with this people today have a lack of exercise and are less active. For most of them recreation is just another movie in bed or anything technology based.

5) Physical activities have reduced drastically. These factors boosted the rate of heart diseases to an unfortunately high percentage.

6) Heart disease is perceived as the deadliest disease in the human life across the world. Presently, diagnosis and treatment process are highly challenging due to inadequacy of physicians and diagnostic apparatus that affect the treatment of heart patients. Early diagnosis of heart disease is significant to minimize the heart related issues and to protect it from serious risks.