

## **PROBLEM STATEMENTS**

- ✓ The major challenge in heart disease is its detection. Early detection of cardiac diseases can decrease the mortality rate and overall complications. However, it is not possible to monitor patients' every day in all cases accurately. A patient cannot be monitored 24/7 by a doctor and is not available since it requires more patience, time and expertise. So we use various methods to analyze the data for avoiding such problems. The data analytics can be used for health diagnosis in medicinal data.
- ✓ Heart disease can be managed effectively with a combination of lifestyle changes, medicine and surgery. The predicted results can be used to prevent and to give timely treatment. The overall objective of the work is to predict accurately with few tests and attributes the presence of heart disease. Many attributes can be considered but our goal is to predict with few attributes and faster efficiency to avoid the risk of having heart disease. Decisions are often made based on doctor's consultation 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.
- ✓ Heart Attack is one of the huge health risks for human's healthy life, early solution and accurate analysis of medical data benefits through patient care and community services. If the qualities of medical data are incomplete, the accuracy of the analysis decreases. Design and Implement the Heart Attack Prediction and Detection System using data analytics.
- ✓ The rate of heart diseases is increasing at an exponential rate. The busy lifestyle of people with fast food in the lunch break and getting back to work without any physical exercise makes them less active which has pushed over the edge.
- ✓ Physical activities boost our strength and immunity. These factors also reduce the rate of heart diseases to high percentage.
- ✓ 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.
- ✓ By analyzing the data of the patients timely reduces the risk of loss of lives. Hence data analytics is used to monitor the data of the patient to save the life.