# DASHBOARD

## WORKING WITH DATASET:

- Understand Dataset
- Load the Dataset
- Explore the Data
- Visualize the Data.

## Understanding the Dataset

This database contains of 14 fields. The "goal" field refers to the presence of heart disease in the patient. It is integer valued from 0 (no presence) to 4.

The data can be downloaded from the following:

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The data dictionary is as follows:

| Sno | Field Name |
| --- | --- |
| 1 | Age |
| 2 | Sex |
| 3 | Chest pain type |
| 4 | BP |
| 5 | Cholesterol |
| 6 | FBS over 120 |
| 7 | EKG results |
| 8 | Max HR |
| 9 | Exercise angina |

| | |
|---|---|
| 10 | ST depression |
| 11 | Slope of ST |
| 12 | Number of vessels fluro |
| 13 | Thallium |
| 14 | Heart Disease |

## Loading the Dataset:

Before you can build a view and analyze your data, you must first connect the data to IBM Cognos.   Cognos supports connecting to a wide variety of data, stored in a variety of places.

The data might be stored on your computer in a spreadsheet or a text file, or in a big data, relational, or cube (multidimensional) database on a server in your enterprise.

In our case, we will be using a spreadsheet or text file for making our analysis.

Load data from **Heart_Disease_Prediction.csv** file which consist of **14 Columns**.

## Exploration of Data:

Exploration of Data relationships among the values is presented along with plotting of Average Age for different Chest Pain Types.  For visualizing it, we will require the following data:

* Sex
* Age
* Chest Pain Type.

# Exploration of BP vs Chest Pain Type And Gender:

**Average BP during the Chest Pain**

We are going to plot average BP recorded for Male and Female based on Gender during the Chest pain recorded.

# Exploration of Max Heart Rate During the Chest Pain

**Average Max Heart Beat Achieved during Chest Pain**

Here we are plotting the average Max Heartbeats recorded for a person based on Gender and Chest Pain Type.

# Exploration of BP By Age

**Blood Pressure exploration by Age.**

Here we need to consider the age as a dimension, because we want to plot the BP values against it. Changing the age from a measure to dimension will allow us to plot all values from BP present in the dataset corresponding to their age.

# Exploration of Cholesterol by Age and Gender

Here we will be exploring the Serum Cholesterol of people recorded with respect to their age.