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:

https://www.kaggle.com/datasets/rishidamarla/heart-disease-prediction

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.