

# Working with Dataset

Date	05 November 2022
Team ID	PNT2022TMID19718
Project Name	Visualizing And Predicting Heart Diseases with An Interactive Dash Board

## Loading and Understanding the Dataset



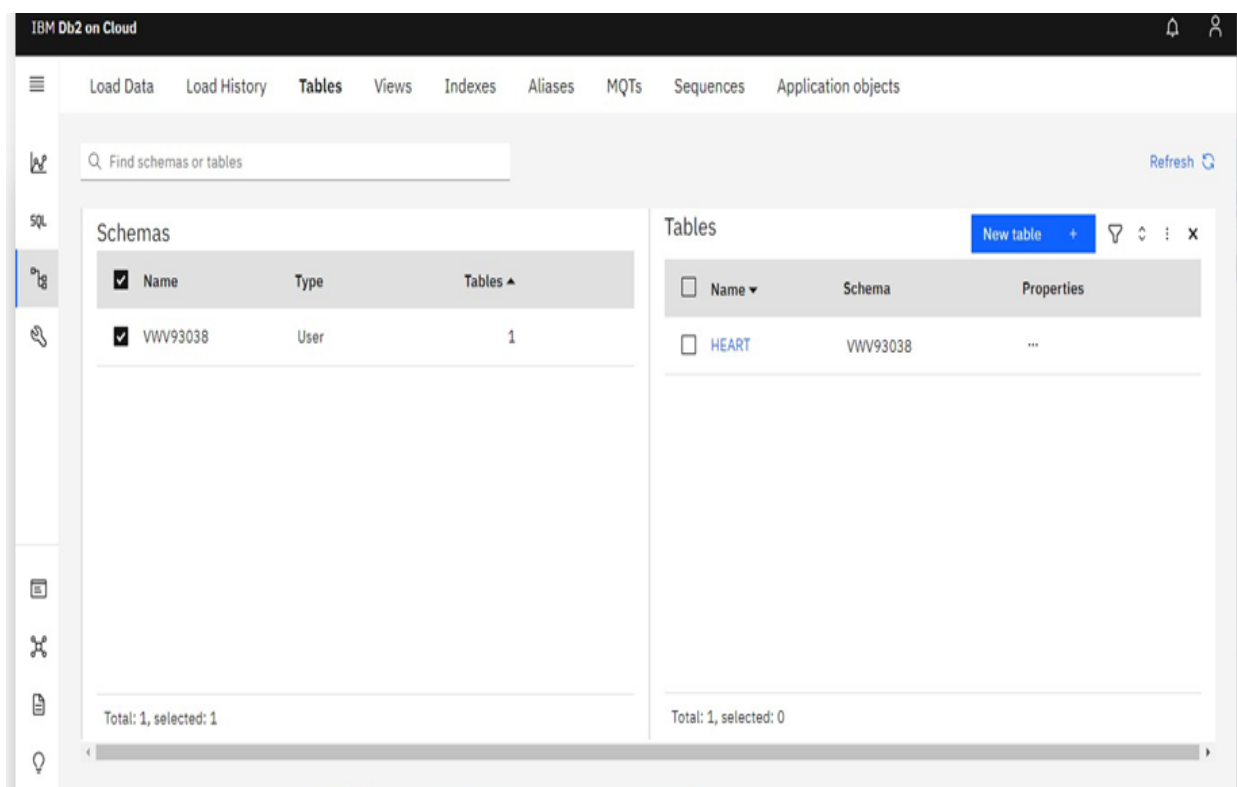
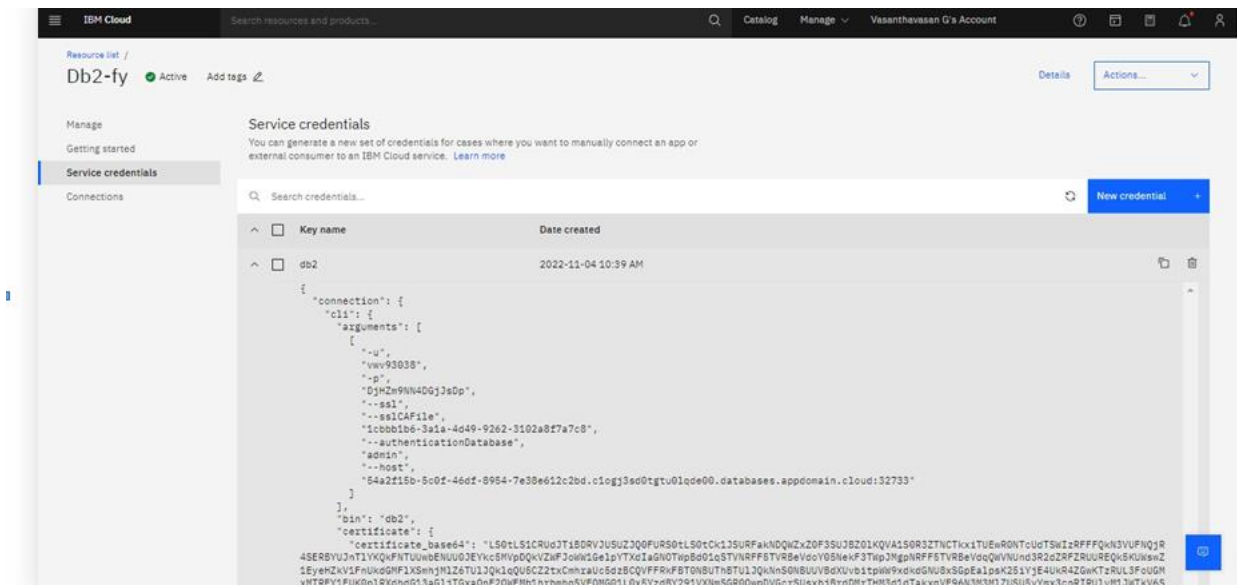
The screenshot displays a Jupyter Notebook environment. On the left, a file explorer shows a directory containing 'sample\_data', 'heart-disease-ibm-project.zip', and 'kaggle.json'. The main area shows a series of terminal commands being executed:

```
[1] !pip install -q kaggle
[2] !mkdir ~/.kaggle
[4] !cp kaggle.json ~/.kaggle/
!kaggle datasets download -d vasanthavasang053/heart-disease-ibm-project
Warning: Your Kaggle API key is readable by other users on this system! To fix this, you can run 'chmod 600 /root/.kaggle/'
Downloading heart-disease-ibm-project.zip to /content
0% 0.00/3.41k [00:00<, ?B/s]
100% 3.41k/3.41k [00:00<00:00, 2.39MB/s]
[7] !unzip /content/heart-disease-ibm-project.zip
```

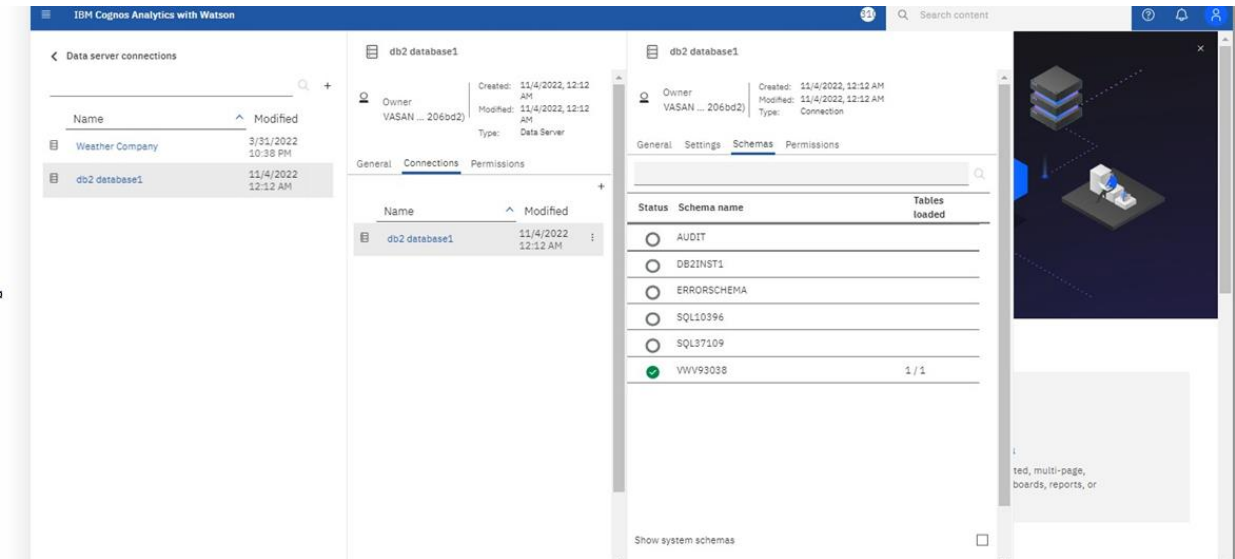
The output of the last command shows the file being unzipped:

```
Archive: /content/heart-disease-ibm-project.zip
inflating: Heart_Disease_Prediction.csv
```

**Successfully created Db2 Service Credential**  
**Successfully created Db2 Service Credential:**



# Successfully connected IBM Cloud Db2 to Cognos Analytics



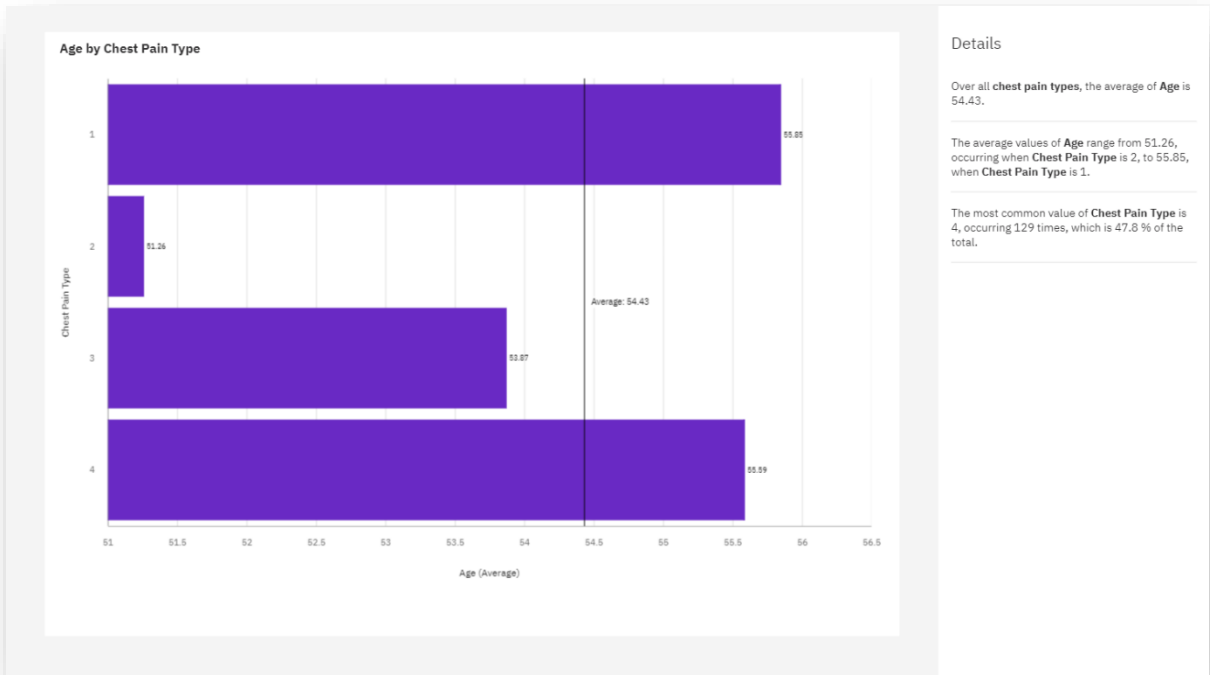
## Data Preparation (Data Module)

The screenshot displays the IBM Cognos Analytics interface with the 'Heart disease data module' selected. The 'Data module' pane on the left shows a list of data modules, including 'Heart disease data module', 'Navigation paths', and 'Heart'. The 'Heart' data module is selected, and the 'Grid' view is active. The grid displays a table of heart disease data with columns: Age, Sex, Chest Pain Type, Bp, Cholesterol, Fbs Over 120, EKG Results, and Max Hr.

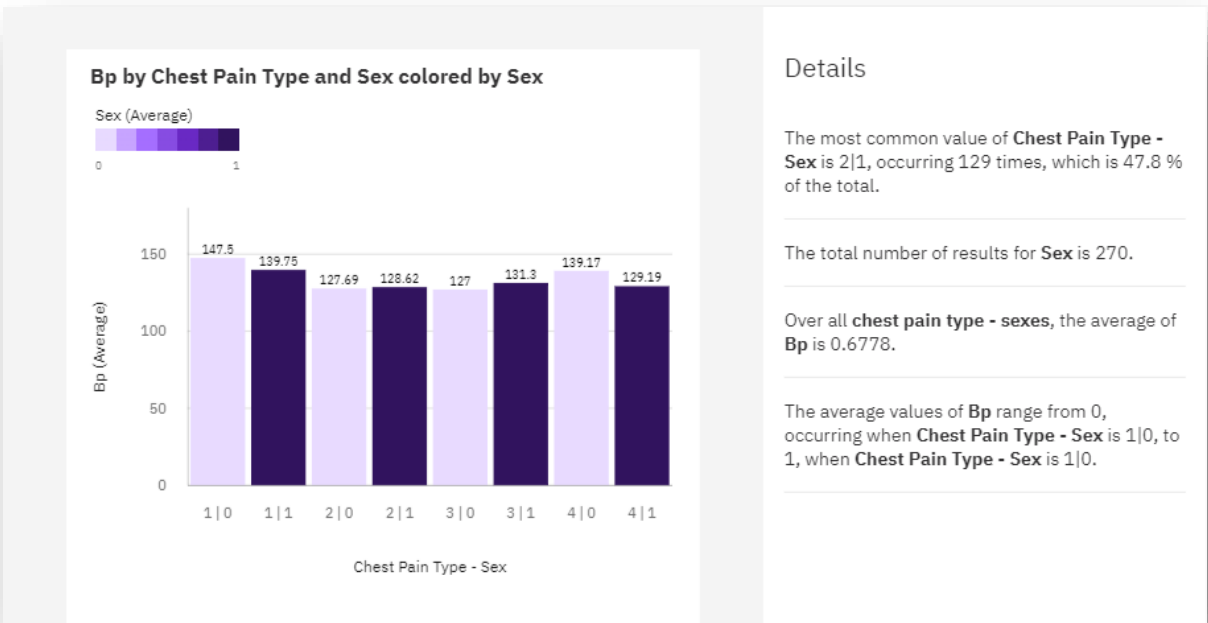
Age	Sex	Chest Pain Type	Bp	Cholesterol	Fbs Over 120	EKG Results	Max Hr
70	1	4	130	322	0	2	109
67	0	3	115	564	0	2	160
57	1	2	124	261	0	0	141
64	1	4	128	263	0	0	105
74	0	2	120	269	0	2	121
65	1	4	120	177	0	0	140
56	1	3	130	256	1	2	142
59	1	4	110	239	0	2	142
60	1	4	140	293	0	2	170
63	0	4	150	407	0	2	154
59	1	4	135	234	0	0	161
53	1	4	142	226	0	2	111
44	1	3	140	235	0	2	180
61	1	1	134	234	0	0	145
57	0	4	128	303	0	2	159

# Exploration of Data:

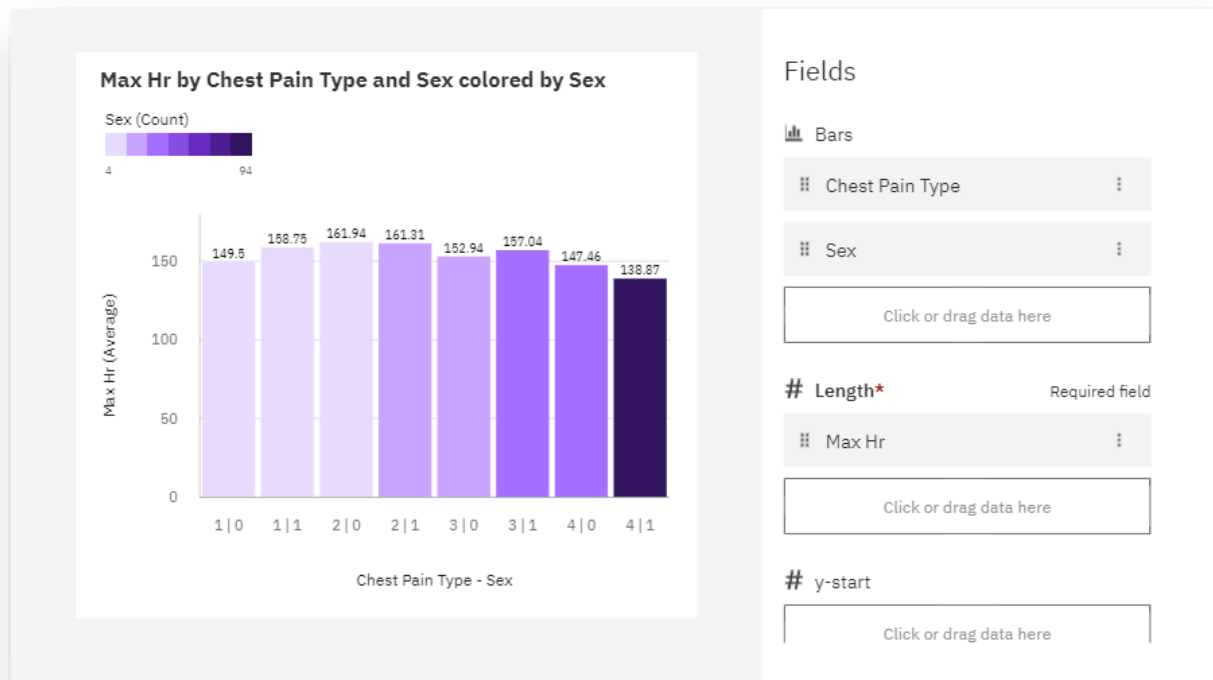
## Age by Chest pain type:



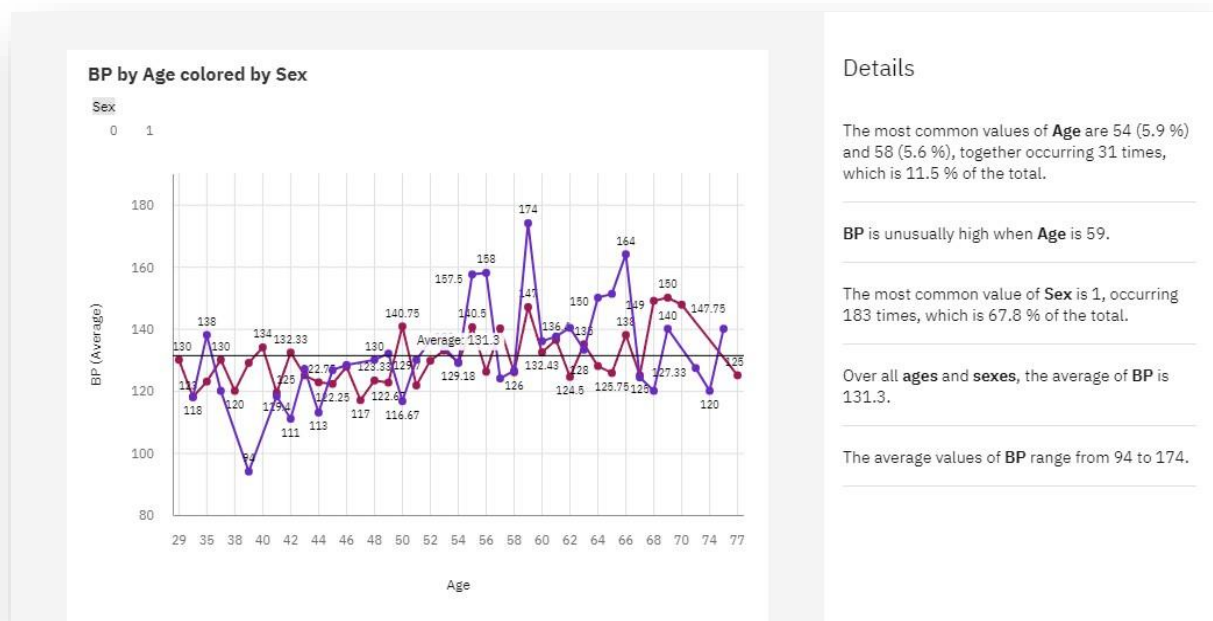
# Exploration of Bp vs Chest pain type and Gender:



## Exploration of Max Heart Rate During Chest pain:



## Exploration of Bp by Age:



# Exploration of Cholesterol by Age and Gender:

