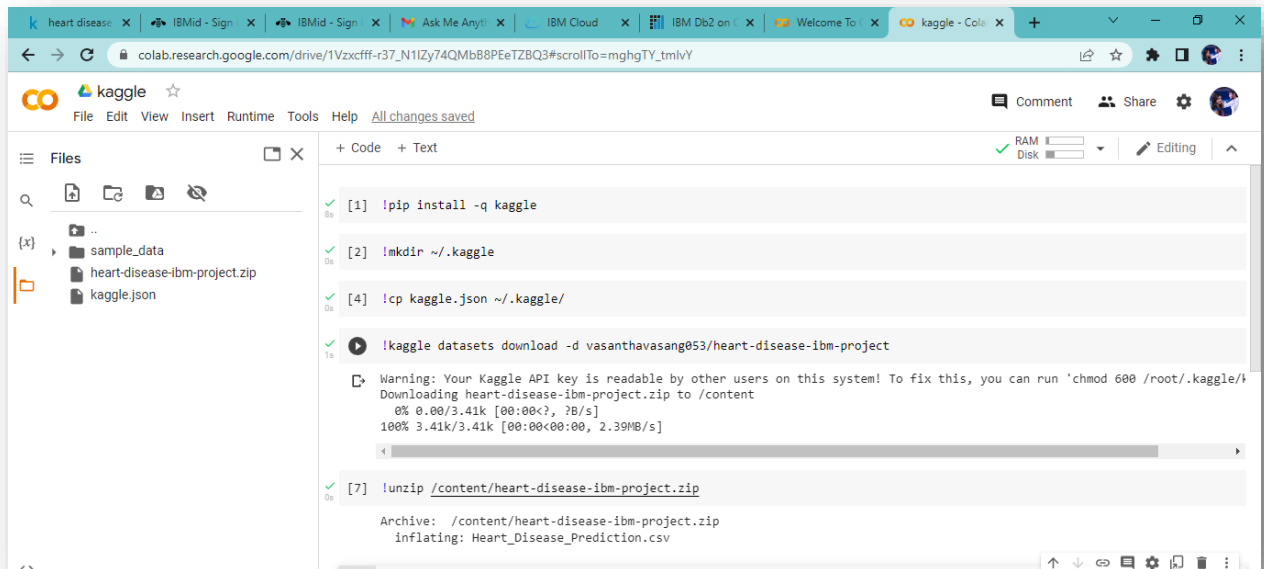


# Working with Dataset

Date	05 November 2022
Team ID	PNT2022TMID34422
Project Name	Visualizing And Predicting Heart Diseases with An Interactive Dash Board

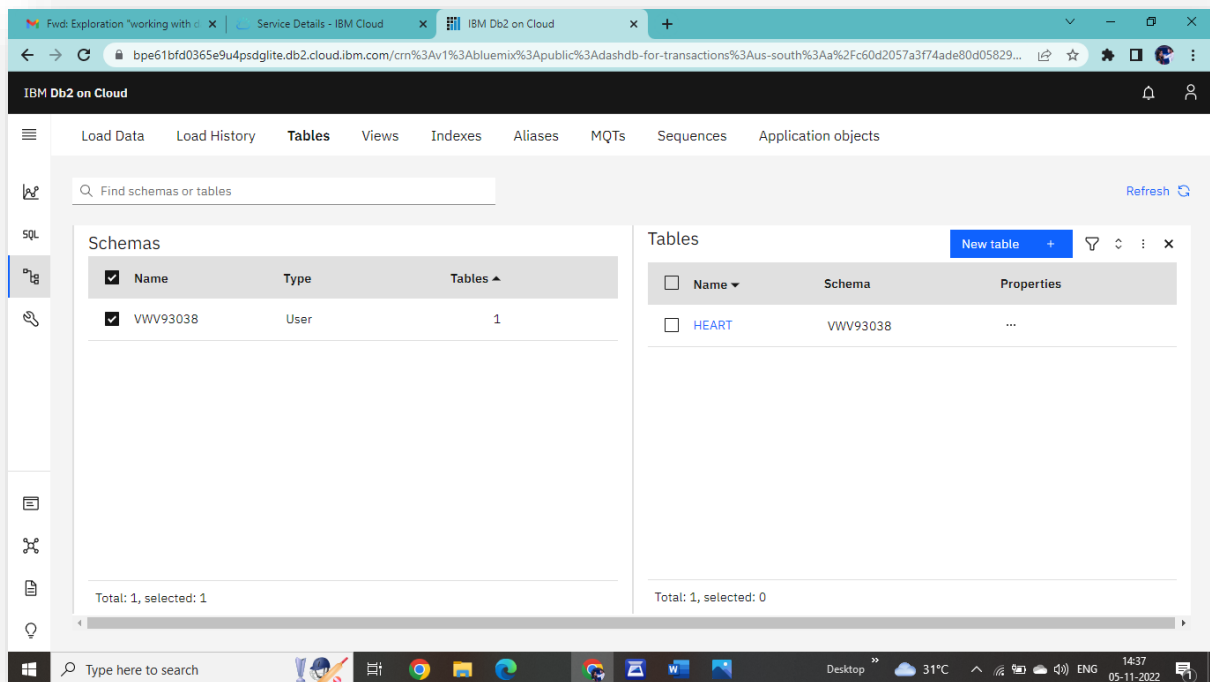
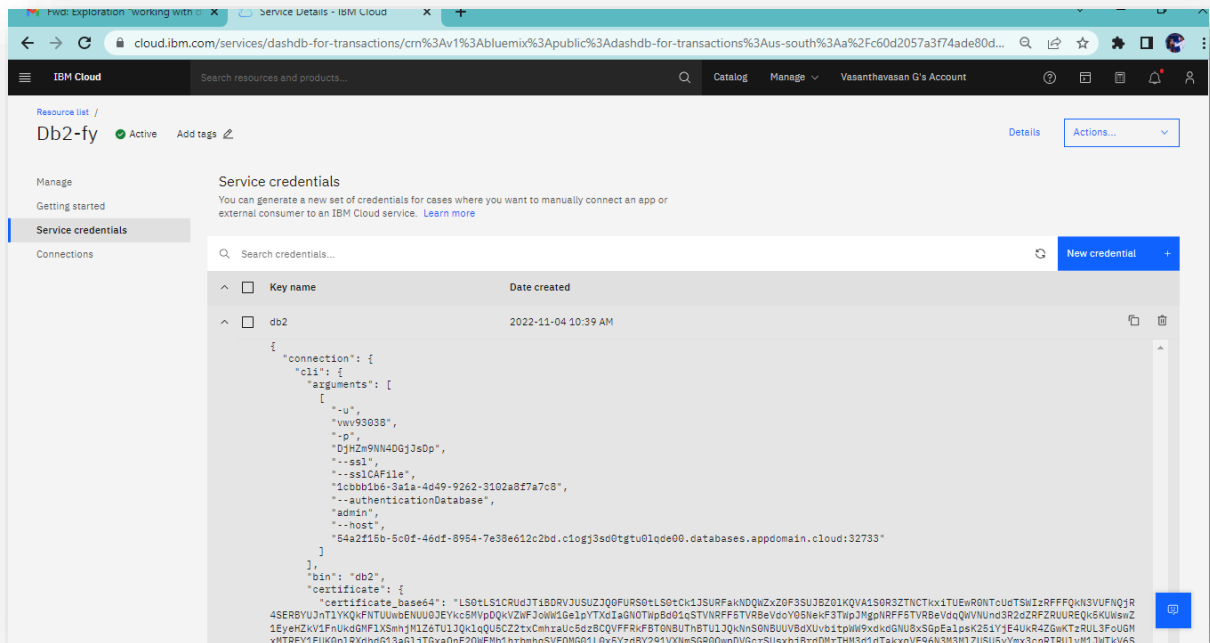
## Loading and Understanding the Dataset



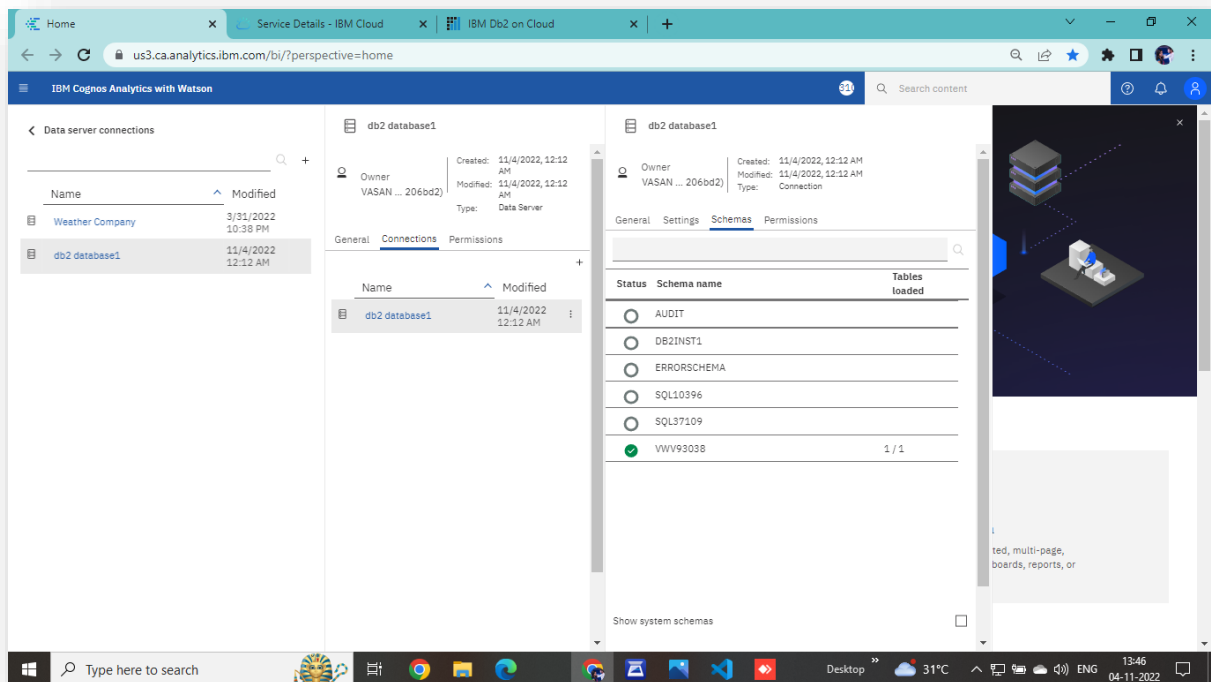
The screenshot shows a Google Colab notebook interface. The left sidebar displays the file explorer with a folder named 'sample\_data' containing 'heart-disease-ibm-project.zip' and 'kaggle.json'. The main area shows a series of code cells executed successfully:

```
[1] !pip install -q kaggle
[2] !mkdir ~/.kaggle
[4] !cp kaggle.json ~/.kaggle/
[5] !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/k
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
Archive: /content/heart-disease-ibm-project.zip
inflating: Heart_Disease_Prediction.csv
```

## Successfully created Db2 Service Credential



# Successfully connected IBM Cloud Db2 to Cognos Analytics



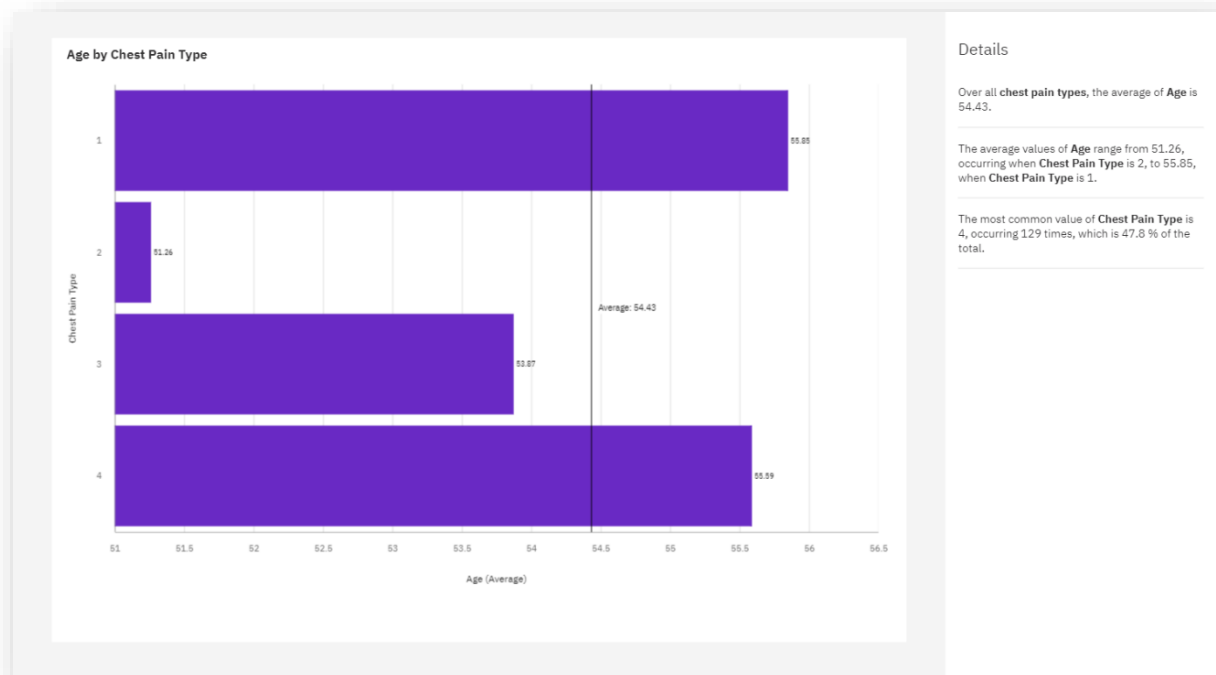
## Data Preparation (Data Module)

The screenshot displays the IBM Cognos Analytics web interface with the 'Heart disease data module' selected. The browser tabs include 'Search results - vasi1062001@...', 'My IBM', 'Heart disease data module', and 'WORKING WITH DATASE1.pdf'. The URL is 'us3.ca.analytics.ibm.com/bi/?perspective=ca-modeler&id=IFFA10435958A4C039945065494B21E89&objRef=IFFA10435958A4C039945065494B21E89&tid=28...'. The interface shows a 'Data module' list on the left with 'Heart' selected. The main panel shows a table of data with columns: 'Age', 'Sex', 'Chest Pain Type', 'Bp', 'Cholesterol', 'Fbs Over 120', 'EKG Results', and 'Max Hr'. The table contains 15 rows of data.

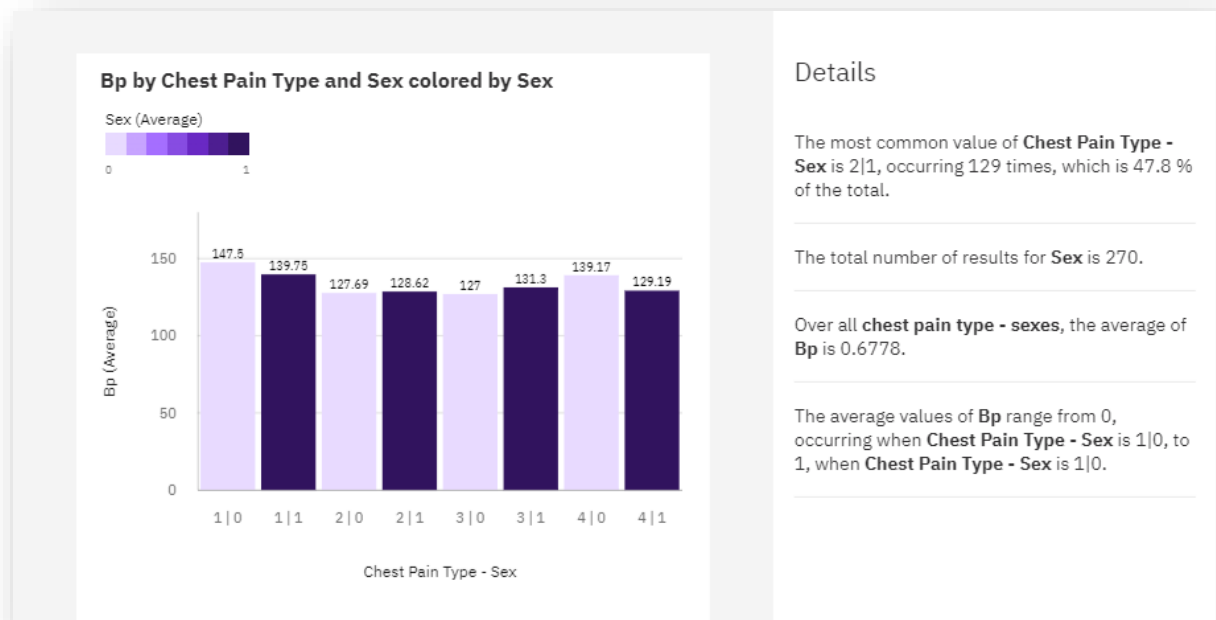
Age	Sex	Chest Pain Type	Bp	Cholesterol	Fbs Over 120	EKG Results	Max Hr
70	1	4	130	322	0	2	109
67	0	3	115	564	0	2	160
57	1	2	124	261	0	0	141
64	1	4	128	263	0	0	105
74	0	2	120	269	0	2	121
65	1	4	120	177	0	0	140
56	1	3	130	256	1	2	142
59	1	4	110	239	0	2	142
60	1	4	140	293	0	2	170
63	0	4	150	407	0	2	154
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:

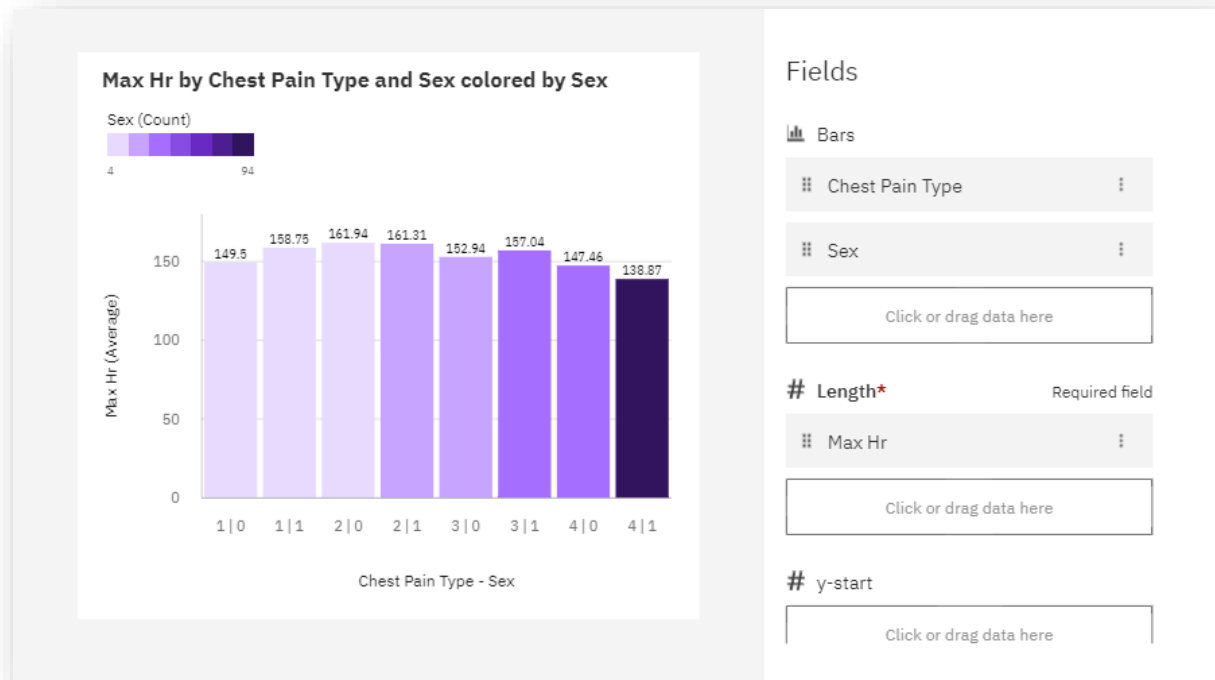
## Age by Chest pain type



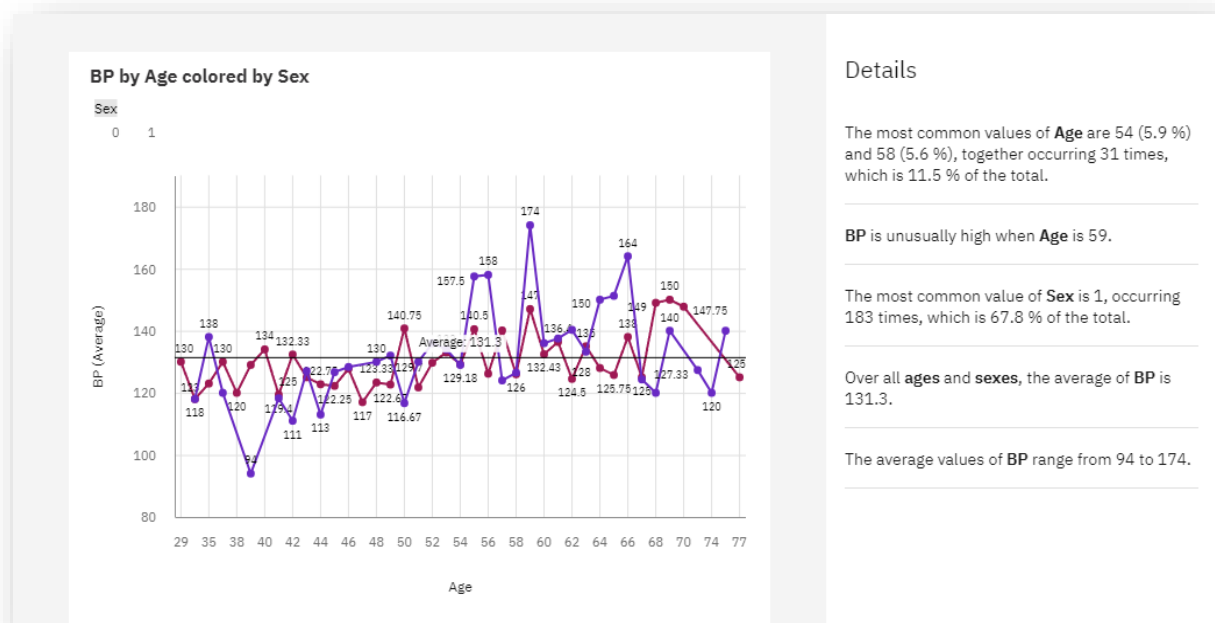
## Exploration of Bp vs Chest pain type and Gender



# Exploration of Max Heart Rate During Chest pain

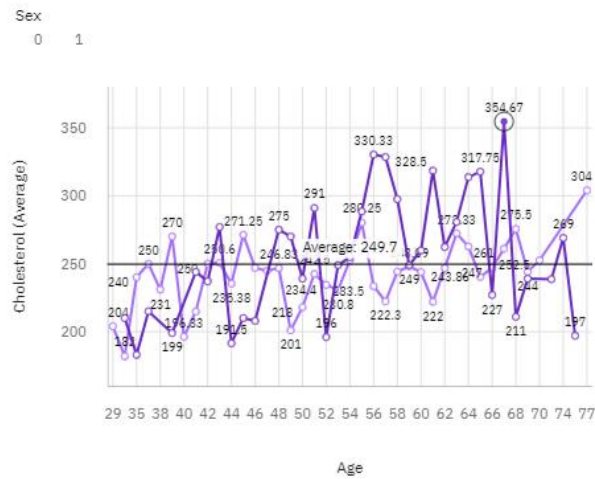


# Exploration of Bp by Age



# Exploration of Cholesterol by Age and Gender

Cholesterol by Age colored by Sex



## Analytics

### Insights

#### Show average value

The average value of Cholesterol is 249.7.

#### Show meaningful differences

1 found

#### Show predictive strength

There is no reliable predictive relationship between Age, Sex and Cholesterol.