

Sprint Delivery Plan II

Date	02 November 2022
Team ID	PPNT2022TMID50017
Project Name	Visualizing and Predicting Heart Diseases with an Interactive Dashboard

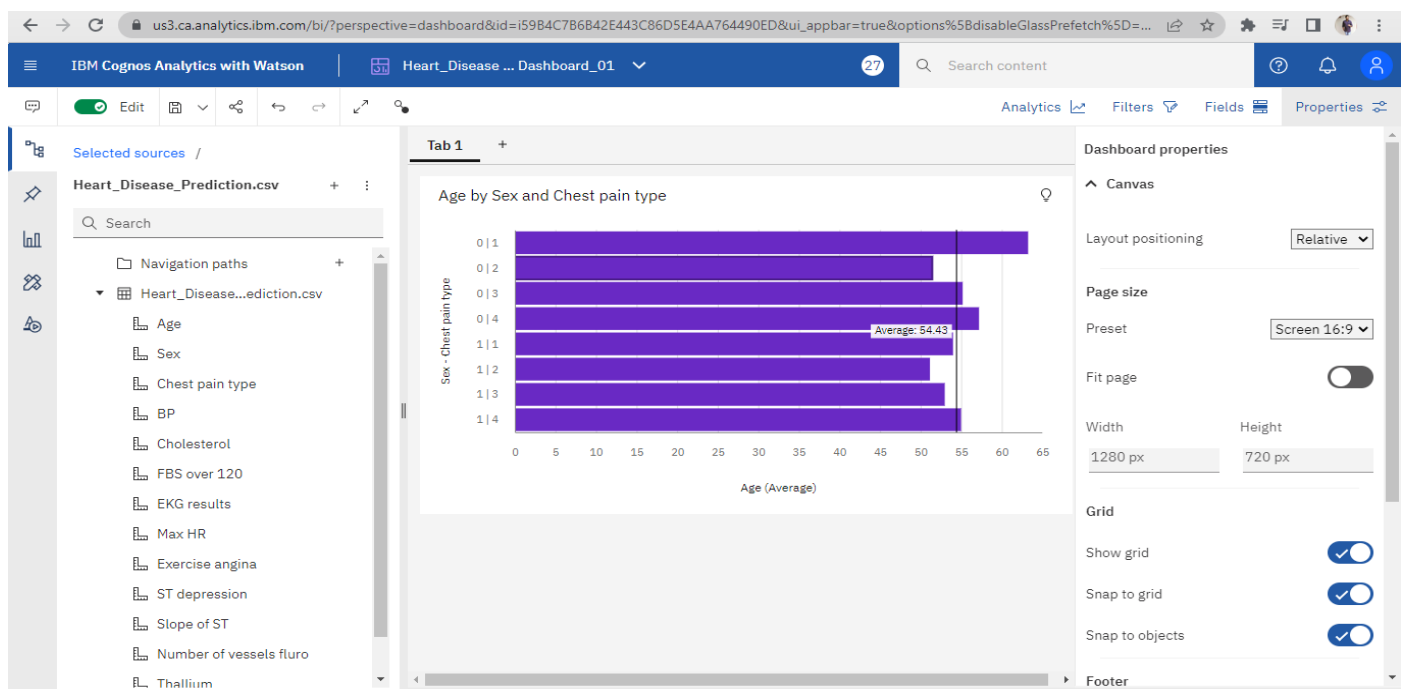
Exploration of Heart disease Prediction Dataset Using Cognos Analysis:

USN-4,5:

- As a Data analyst, I create a predicted model by also preparing story card with using explored data.
- As a Data analyst, I will create different types of models in explored data to identify suitable model with effectively and efficiently.

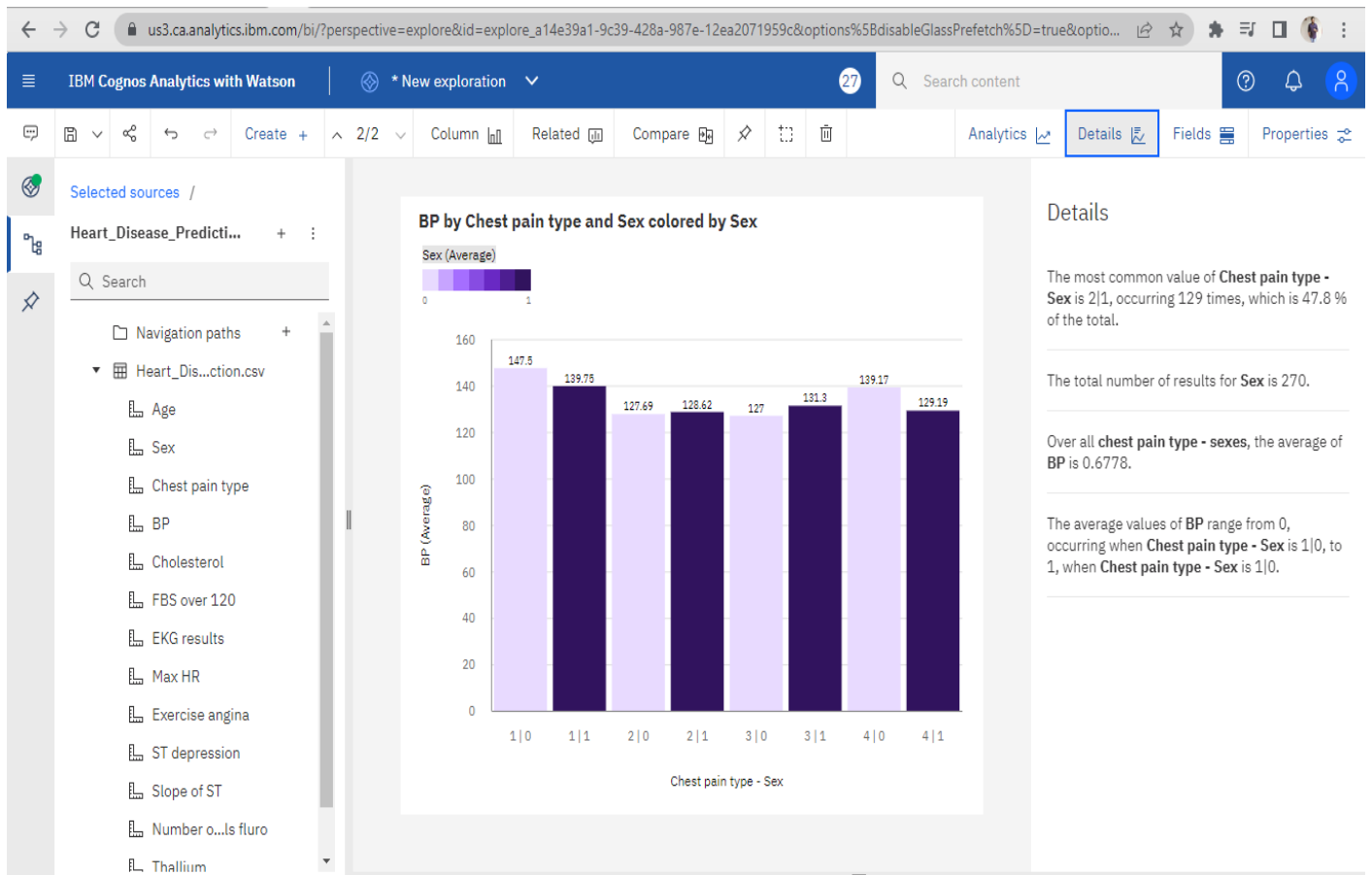
Age By Chest pain type:

- ✓ The most common value of **Chest pain type** is 4, occurring 129 times, which is 47.8 % of the total.
- ✓ Over all **chest pain types**, the average of **Age** is 54.43.
- ✓ The average values of **Age** range from 51.26, occurring when **Chest pain type** is 2, to 55.85, when **Chest pain type** is 1.



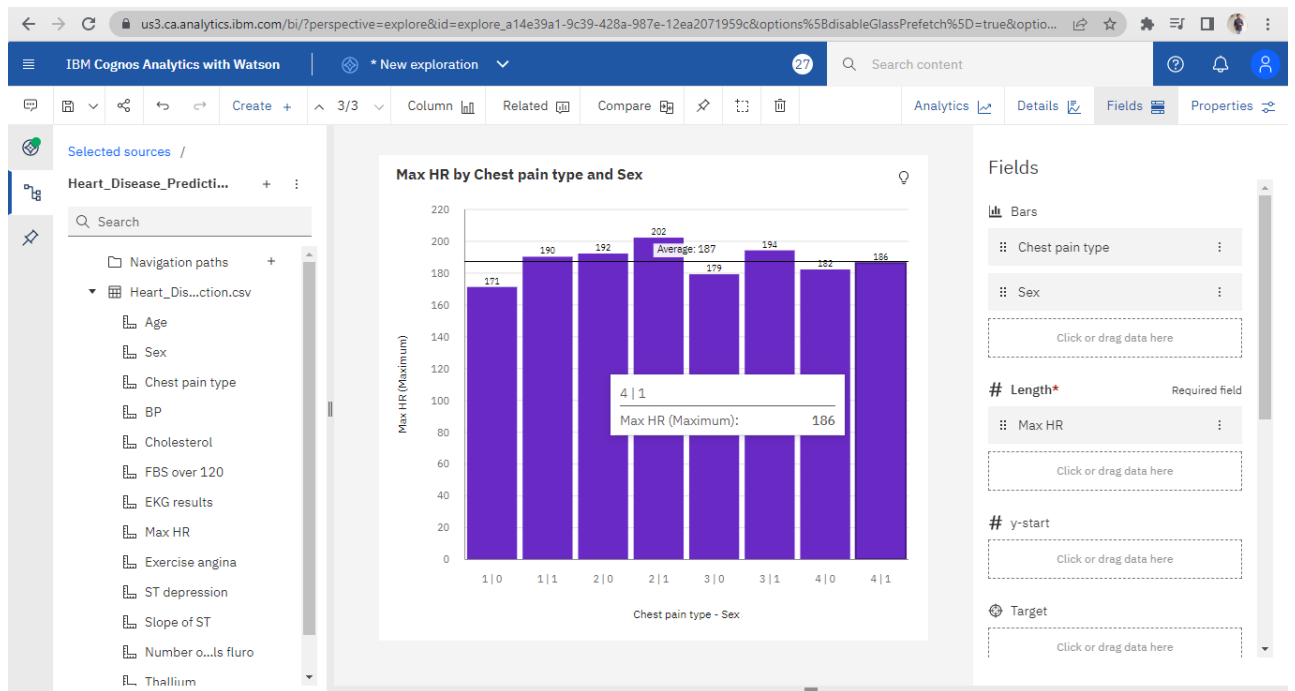
BP by Chest pain type and Sex coloured by Sex:

- The most common value of **Chest pain type - Sex** is 2|1, occurring 129 times, which is 47.8 % of the total.
- The total number of results for **Sex** is 270.
- Over all **chest pain type - sexes**, the average of **BP** is 0.6778.
- The average values of **BP** range from 0, occurring when **Chest pain type - Sex** is 1|0, to 1, when **Chest pain type - Sex** is 1|0.



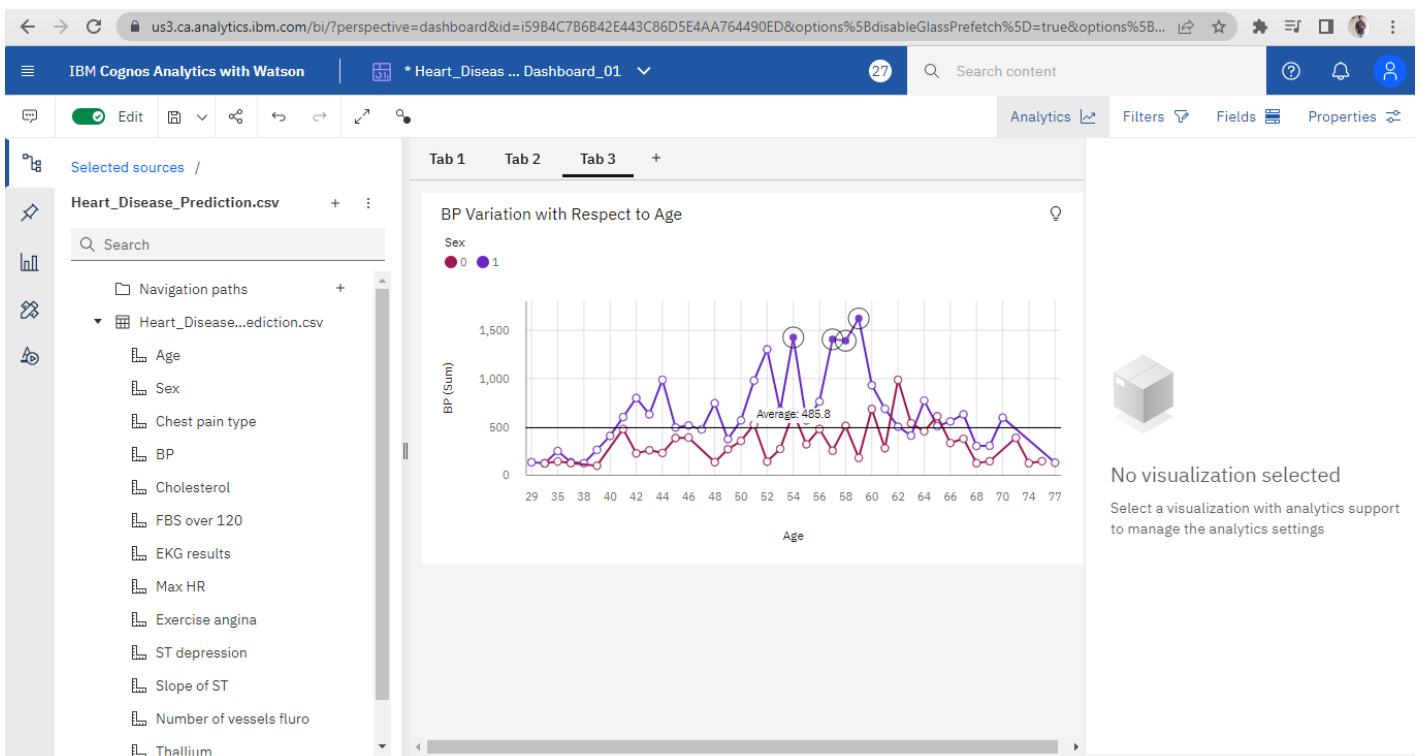
Max HR by Chest pain type and Sex:

- ❖ The total number of results for **Max HR**, across all **chest pain type - sexes**, is 270.
- ❖ The most common value of **Chest pain type - Sex** is 2|1, occurring 129 times, which is 47.8 % of the total.
- ❖ The largest value of **Max HR** is 1, occurring when **Chest pain type - Sex** is 1|0.



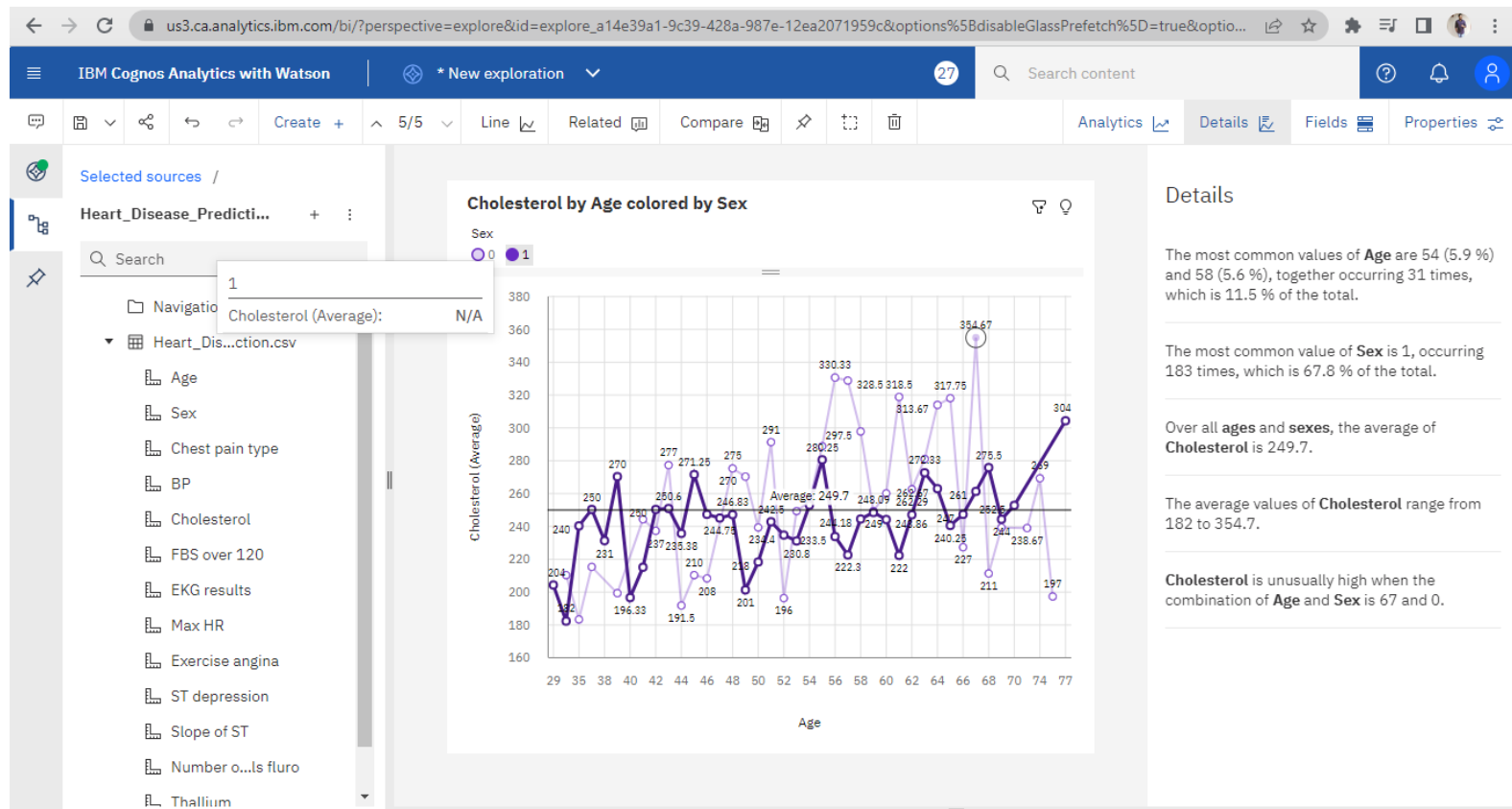
BP by Age:

- The most common values of **Age** are 54 (5.9 %) and 58 (5.6 %), together occurring 31 times, which is 11.5 % of the total.
- Over all **ages**, the average of **BP** is 131.3.
- The average values of **BP** range from 117, occurring when **Age** is 47, to 149.2, when **Age** is 59.
- BP** is unusually high when **Age** is 59.



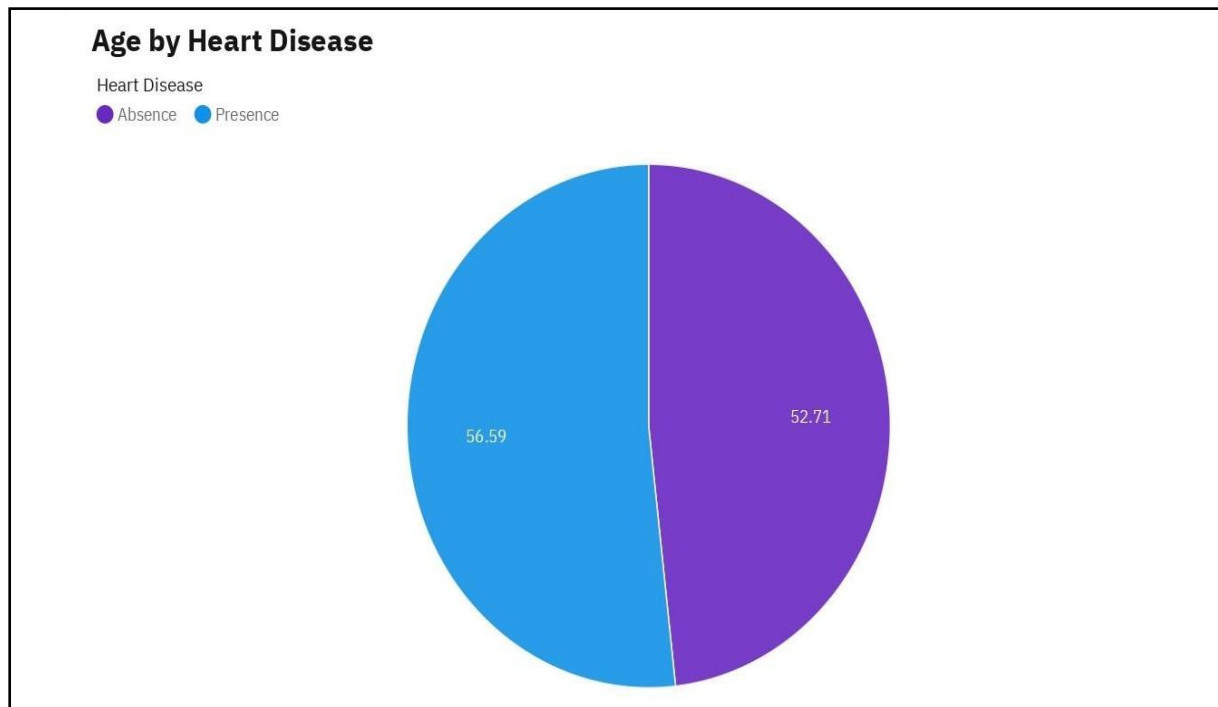
Cholesterol by Age colored by Gender:

- ✓ Over all **ages** and **sexes**, the average of **Cholesterol** is 249.7.
- ✓ The average values of **Cholesterol** range from 182 to 354.7.
- ✓ **Cholesterol** is unusually high when the combination of **Age** and **Sex** is 67 and 0.
- ✓ The most common values of **Age** are 54 (5.9 %) and 58 (5.6 %), together occurring 31 times, which is 11.5 % of the total.
- ✓ The most common value of **Sex** is 1, occurring 183 times, which is 67.8 % of the total.



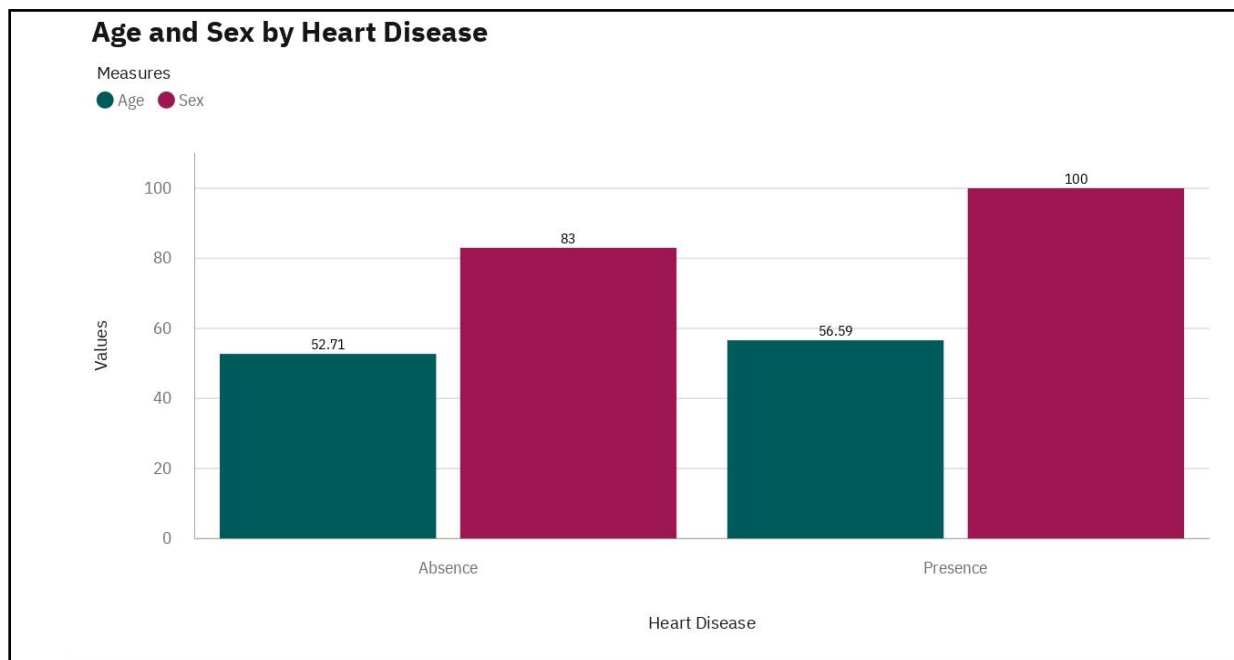
Age By Heart Disease:

- ❖ The most common value of **heart disease** is Absence, occurring 150 times, which is 55.6 % of the total.
- ❖ Over all **heart diseases**, the average of **Age** is 54.43.
- ❖ The average values of **Age** range from 52.71, occurring when **heart disease** is Absence, to 56.59, when **heart disease** is Presence.



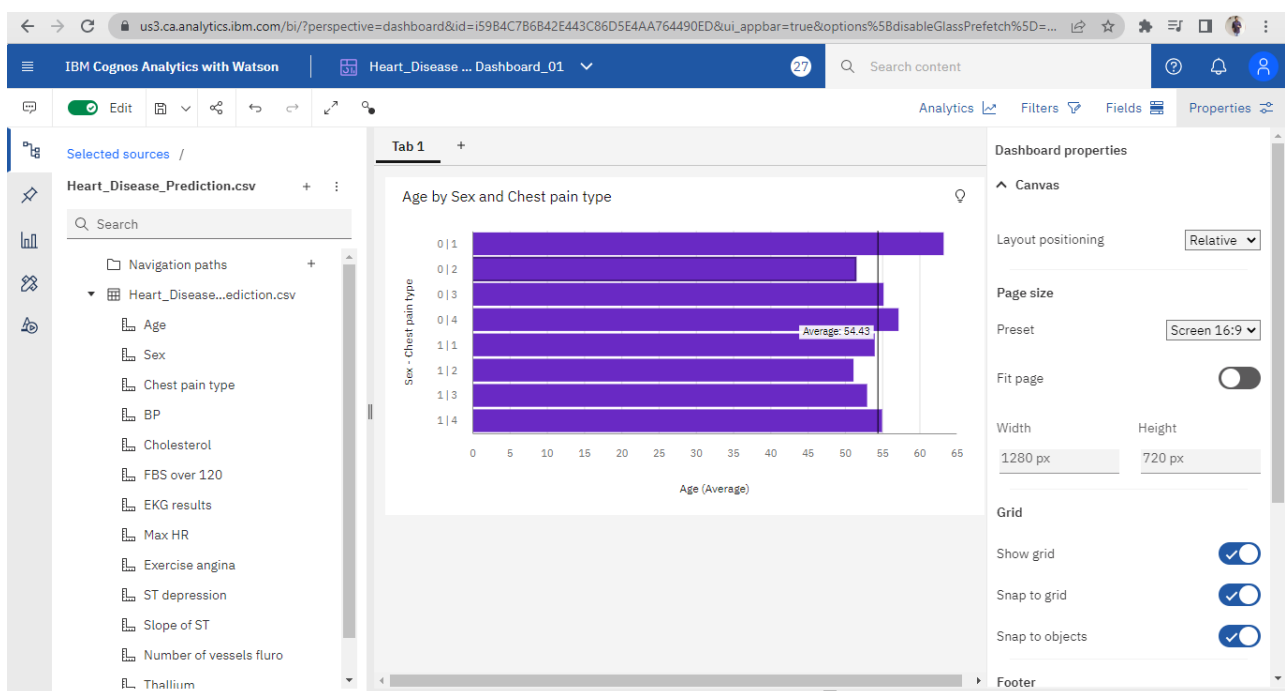
Age and Sex by Heart Disease:

- The total number of results for **Sex**, across all **heart diseases**, is 270.
- Over all **heart diseases**, the average of **Sex** is 0.6778.
- The most common value of **Heart Disease** is Absence, occurring 150 times, which is 55.6 % of the total.
- The average values of **Age** range from 52.71, occurring when **heart disease** is Absence, to 56.59, when **heart disease** is Presence.
- **Sex** ranges from 83, when **heart disease** is Absence, to 100, when **heart disease** is Presence.
- The total number of results for **Age**, across all **heart diseases**, is 270.



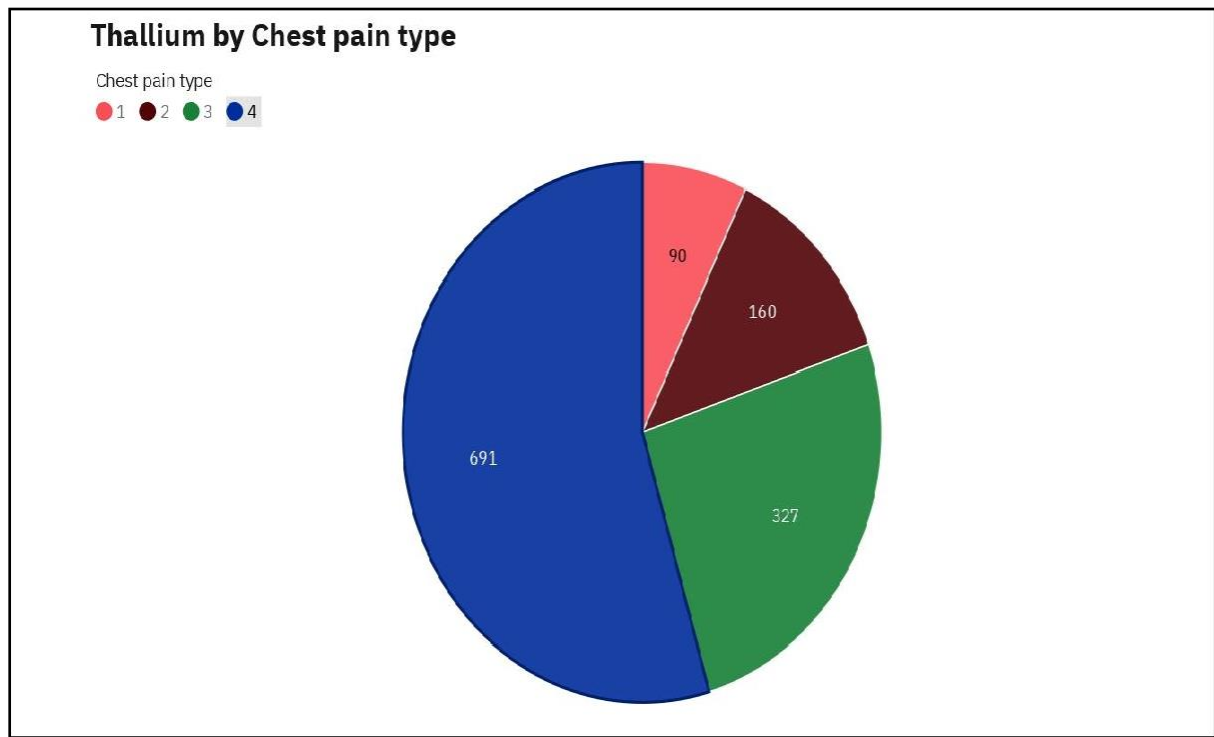
Chest pain type by Chest pain type:

- ✓ The total number of results for **Chest pain type**, across all **chest pain types**, is 270.
- ✓ The most common value of **Chest pain type** is 4, occurring 129 times, which is 47.8 % of the total.
- ✓ The count is unusually high when **Chest pain type** is 4.



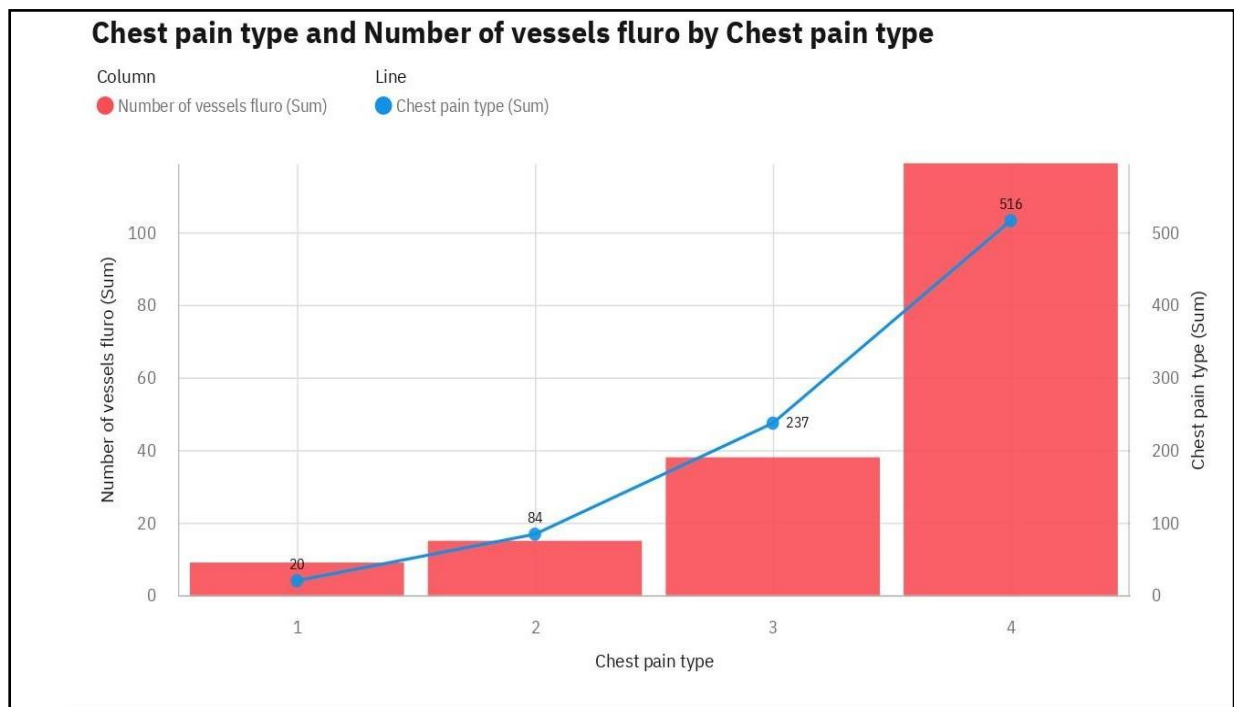
Thallium by Chest pain type:

- Over all **chest pain types**, the sum of **Thallium** is nearly 1500.
- **Thallium** ranges from 90, when **Chest pain type** is 1, to 691, when **Chest pain type** is 4.
- **Thallium** is unusually high when **Chest pain type** is 4.



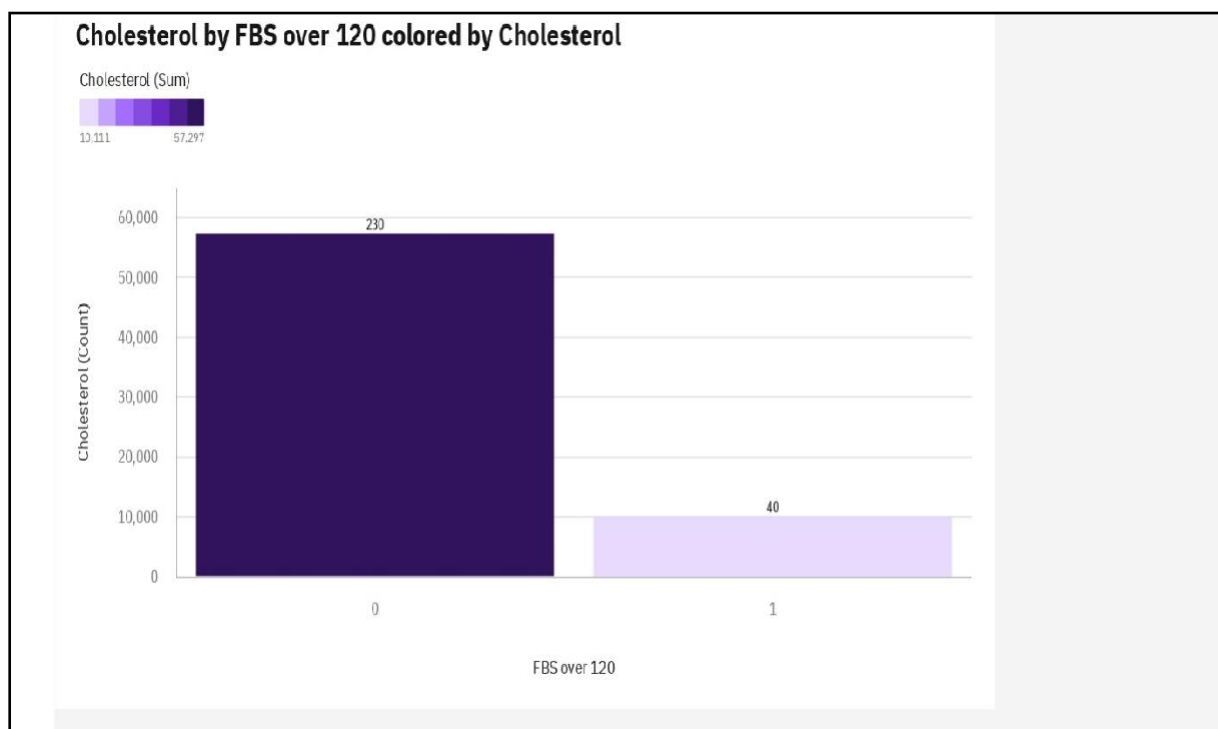
Chest pain type and Number of vessels Fluro by Chest pain type:

- Over all **chest pain types**, the sum of **Number of vessels fluro** is 181.
- **Number of vessels fluro** ranges from 9, when **Chest pain type** is 1, to 119, when **Chest pain type** is 4.
- **Number of vessels fluro** is unusually high when **Chest pain type** is 4.
- Over all **chest pain types**, the sum of **Chest pain type** is 857.
- **Chest pain type** ranges from 20, when **Chest pain type** is 1, to 516, when **Chest pain type** is 4.
- **Chest pain type** is unusually high when **Chest pain type** is 4.



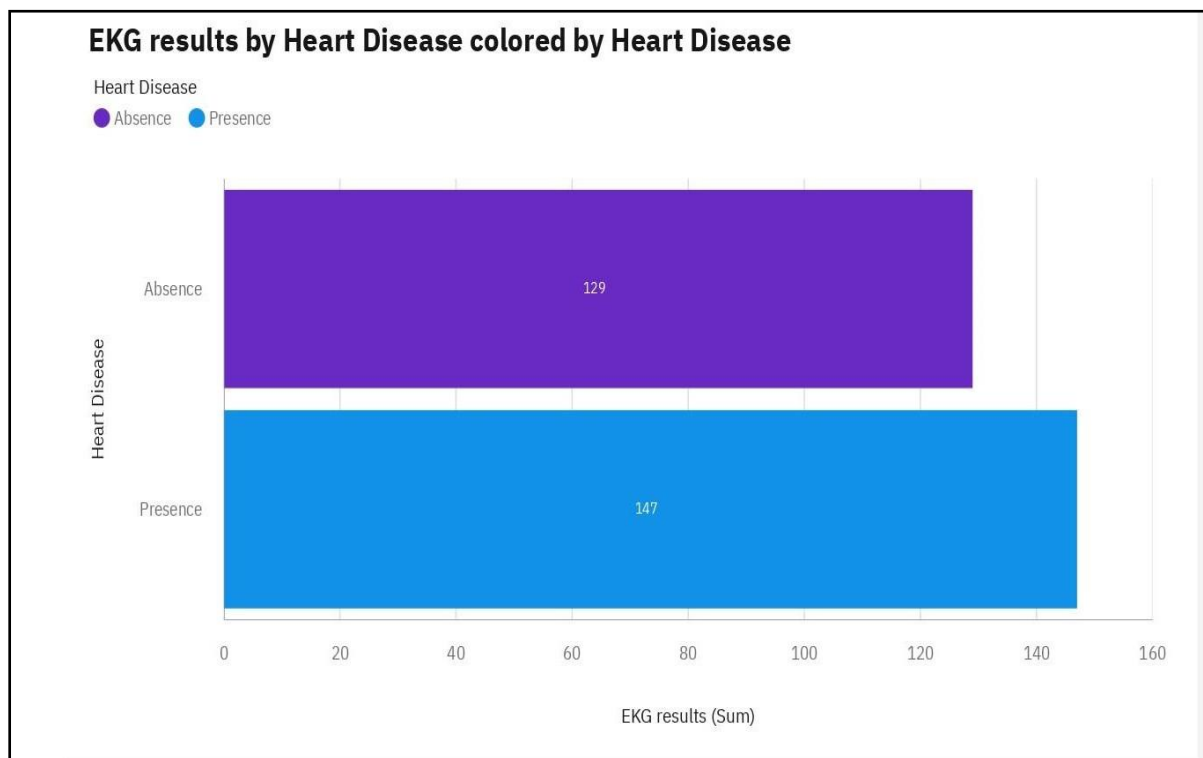
Cholesterol by FBS over 120 coloured by Cholesterol:

- ✓ The total number of results for **Cholesterol** is 270.
- ✓ The most common value of **FBS over 120** is 0, occurring 230 times, which is 85.2 % of the total.



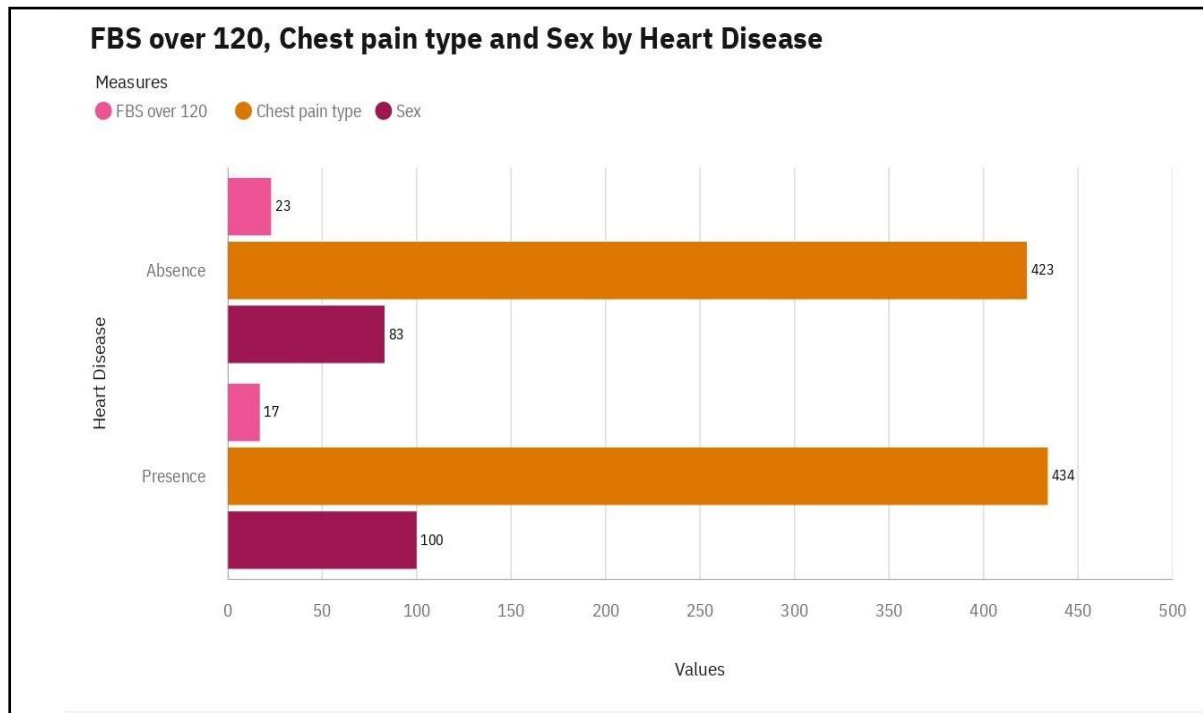
EKG results by heart disease colored by heart disease:

- For **EKG results**, the most significant value of **heart disease** is Presence, whose respective **EKG results** values add up to 147, or 53.3 % of the total.
- Over all **heart diseases** and **heart diseases**, the sum of **EKG results** is 276.
- The summed values of **EKG results** range from 129 to 147.



FBS over 120, Chest pain type and Sex by Heart Disease:

- ✓ **FBS over 120** ranges from 17, when **heart disease** is Presence, to 23, when **heart disease** is Absence.
- ✓ **Chest pain type** ranges from 423, when **heart disease** is Absence, to 434, when **heart disease** is Presence.
- ✓ **Sex** ranges from 83, when **heart disease** is Absence, to 100, when **heart disease** is Presence.
- ✓ The total number of results for **Sex**, across all **heart diseases**, is 270.
- ✓ Over all **heart diseases**, the average of **Sex** is 0.6778.
- ✓ The most common value of **heart disease** is Absence, occurring 150 times, which is 55.6 % of the total.
- ✓ The total number of results for **Chest pain type**, across all **heart diseases**, is 270.
- ✓ Over all **heart diseases**, the average of **Chest pain type** is 3.174.
- ✓ The total number of results for **FBS over 120**, across all **heart diseases**, is 270.
- ✓ Over all **heart diseases**, the average of **FBS over 120** is 0.1481.



Age and Max HR for Sex:

- The total number of results for **Age**, across all **sexes**, is 2.
- The total number of results for **Max HR**, across all **sexes**, is 2.
- The average values of **Age** range from 53.84, occurring when **Sex** is 1, to 55.68, when **Sex** is 0.
- The largest value of **Max HR** is 202, occurring when **Sex** is 1.

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IBM Cognos Analytics with Watson | Heart_Diseases ... Dashboard_01 | 27 | Search content

Analytics | Filters | Fields | Properties

Selected sources / Heart_Disease_Prediction.csv

Heart_Disease...ediction.csv

- Age
- Sex
- Chest pain type
- BP
- Cholesterol
- FBS over 120
- EKG results
- Max HR
- Exercise angina
- ST depression
- Slope of ST
- Number of vessels fluro
- Thallium
- Heart Disease

Tab 1 | Tab 2 | Tab 3 | Tab 4 | **Tab 5** | +

Average Age for Different Types of chest pain in Existing Heart Disease

Heart Disease	1	2	3	4	Si
0	4	16	32	35	
1	16	26	47	94	
Summary	20	42	79	129	

No visualization selected

Select a visualization to manage the field settings.

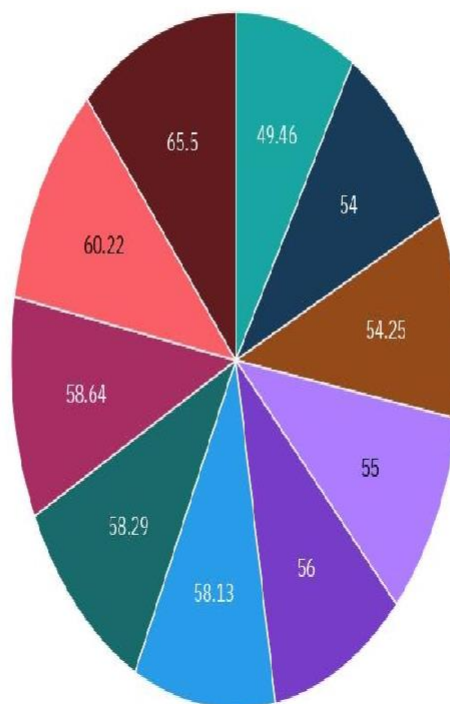
Age by Thallium, Sex and Heart Disease:

- ❖ Over all **thallium - sex - heart diseases**, the average of **Age** is 0.3222.
- ❖ The average values of **Age** range from 0, occurring when **Thallium - Sex - heart disease** is 3|1|Absence, to 1, when **Thallium - Sex - heart disease** is 3|1|Absence.
- ❖ **Age** is unusually low when **Thallium - Sex - heart disease** is 3|1|Absence.
- ❖ The most common values of **Thallium - Sex - heart disease** is 3|1|Absence (56.3 %) and 7|1|Absence (38.5 %), together occurring 256 times, which is 94.8 % of the total.

Age by Thallium, Sex and Heart Disease

Thallium - Sex - Heart Disease

3|1|Absence 7|1|Absence 3|0|Absence 7|1|Presence 6|1|Absence 6|1|Presence 3|1|Presence
7|0|Presence 3|0|Presence 7|0|Absence



Cholesterol by Heart Disease and Chest pain type colored by Sex:

- ✓ The most common value of **heart disease - Chest pain type** is Absence|1, occurring 150 times, which is 55.6 % of the total.
- ✓ The most common value of **Sex** is Sex_CAT3, occurring 129 times, which is 47.8 % of the total.
- ✓ The most common value of **Sex** is 1, occurring 42 times, which is 67.7 % of the total.
- ✓ The total number of results for **Cholesterol**, across all **heart disease - chest pain types**, is 270.

