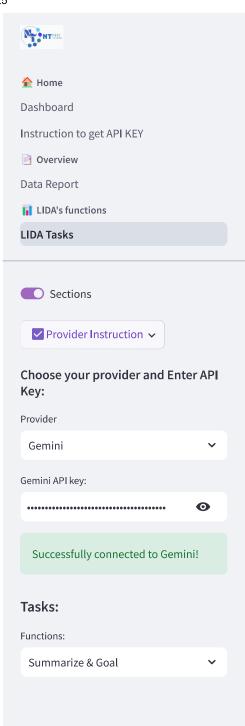
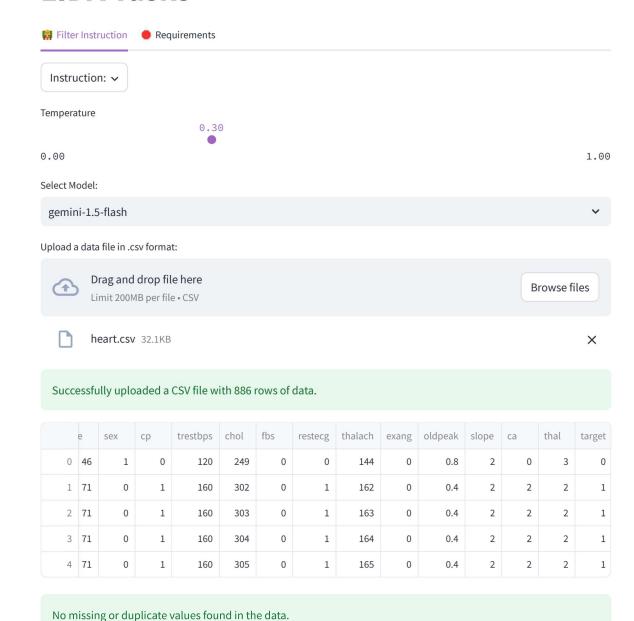
13:27 3/5/25 NTViz



# **LIDA Tasks**



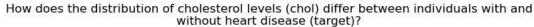
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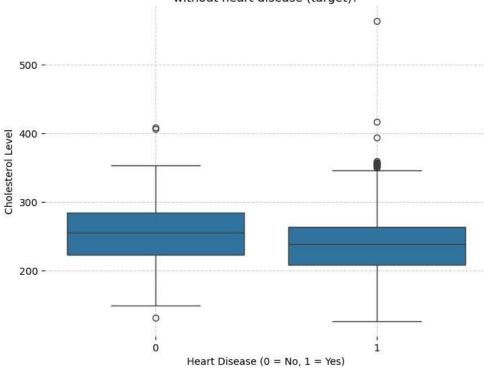
Generate Charts

# **\*** Insight 0:

main() Goal Goal(question='How does the distribution of cholesterol levels (chol) differ between individuals with and without heart disease (target)?', visualization='Box plot of chol split by target', rationale='A box plot allows for a visual comparison of the central tendency, spread, and potential outliers i...

A visualization goal	
index int	0
question str	'How does the distribution of cholesterol levels (chol) differ between individuals with and without heart disease (target)?'
rationale str	'A box plot allows for a visual comparison of the central tendency, spread, and potential outliers in cholesterol levels between the two groups. This helps identify potential correlations between cholesterol and heart disease.'
visualization str	'Box plot of chol split by target'





#### <u>\*\* 「つ・ま・?つ Download Chart \*\*</u>



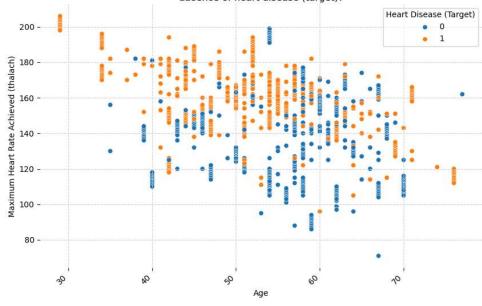
# **\*** Insight 1:

main() Goal Goal(question='What is the relationship between maximum heart rate achieved
(thalach) and age, considering the presence or absence of heart disease (target)?',
visualization='Scatter plot of thalach vs. age, colored by target', rationale='This
visualization helps explore the potential interaction ef...

A visualization goal

index int	1
question str	'What is the relationship between maximum heart rate achieved (thalach) and age, considering the presence or absence of heart disease (target)?'
rationale str	'This visualization helps explore the potential interaction effect of age and maximum heart rate on heart disease. Color-coding by target allows for easy comparison of the trends across the two groups.'
visualization str	'Scatter plot of thalach vs. age, colored by target'

What is the relationship between maximum heart rate achieved (thalach) and age, considering the presence or absence of heart disease (target)?



### \*\* 「つ・・・?つ Download Chart \*\*



# **★** Insight 2:

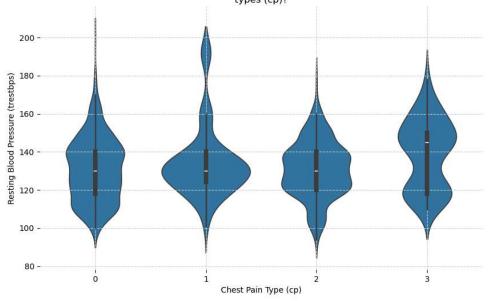
main() Goal Goal(question='Is there a significant difference in the distribution of
resting blood pressure (trestbps) across different chest pain types (cp)?',

visualization='Violin plot of trestbps grouped by cp', rationale='Violin plots combine the benefits of box plots and kernel density estimations, providi...

#### A visualization goal

index int	2
question str	'Is there a significant difference in the distribution of resting blood pressure (trestbps) across different chest pain types (cp)?'
rationale str	'Violin plots combine the benefits of box plots and kernel density estimations, providing a richer understanding of the distribution of resting blood pressure for each chest pain type. This can reveal potential relationships between chest pain type and blood pressure.'
visualization str	'Violin plot of trestbps grouped by cp'

# Is there a significant difference in the distribution of resting blood pressure (trestbps) across different chest pain types (cp)?



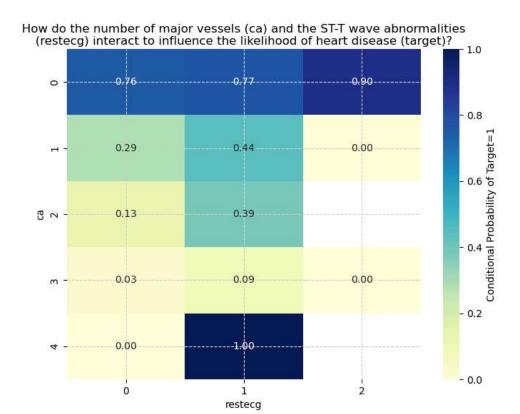
### <u>\*\* いっ・・?つ Download Chart \*\*</u>



# **★** Insight 3:

main() Goal Goal(question='How do the number of major vessels (ca) and the ST-T wave
abnormalities (restecg) interact to influence the likelihood of heart disease
(target)?', visualization='Heatmap showing the count of individuals for each combination
of ca and restecg, with conditional probabilities of target=...

A visualization goal	
index int	3
question str	'How do the number of major vessels (ca) and the ST-T wave abnormalities (restecg) interact to influence the likelihood of heart disease (target)?'
rationale str	'A heatmap visualizes the joint distribution of ca and restecg, allowing for the identification of combinations that are strongly associated with heart disease. Adding conditional probabilities of target=1 provides a direct measure of risk for each combination.'
visualization str	'Heatmap showing the count of individuals for each combination of ca and restecg, with conditional probabilities of target=1'



<u>\*\* 「つ・ま・?つ Download Chart \*\*</u>

VizOps

# \* Insight 4:

main() Goal Goal(question='What is the combined effect of age, sex, and cholesterol
 (chol) on the likelihood of heart disease (target)?', visualization='3D scatter plot of
 age, sex (coded numerically), and chol, colored by target', rationale='A 3D scatter plot
 allows for the visualization of the relationship be...

A visualization goal

#### NTViz

index int	4
question str	'What is the combined effect of age, sex, and cholesterol (chol) on the likelihood of heart disease (target)?'
rationale str	'A 3D scatter plot allows for the visualization of the relationship between three continuous and one categorical variable. Color-coding by target allows for the identification of regions in the 3D space where the likelihood of heart disease is higher or lower.'
visualization str	'3D scatter plot of age, sex (coded numerically), and chol, colored by target'

localhost:8501/task