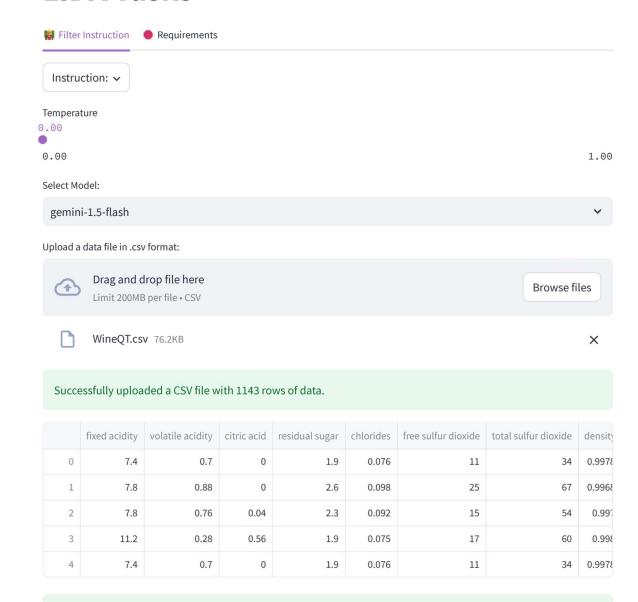


# **LIDA Tasks**

No missing or duplicate values found in the data.

NTViz

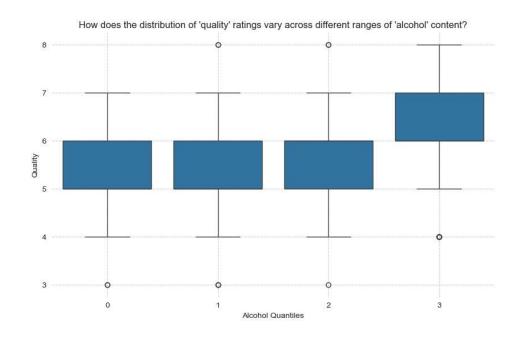


Generate Charts

## **\*** Insight 0:

main() Goal Goal(question="How does the distribution of 'quality' ratings vary across
different ranges of 'alcohol' content?", visualization="Box plot of 'quality' vs.
'alcohol', with 'alcohol' categorized into quantiles.", rationale="This visualization
uses 'quality' as the dependent variable and 'alcohol' as ...

A visualization goal	
index int	0
question str	"How does the distribution of 'quality' ratings vary across different ranges of 'alcohol' content?"
rationale str	"This visualization uses 'quality' as the dependent variable and 'alcohol' as the independent variable. Categorizing 'alcohol' into quantiles allows for a clearer comparison of quality across different alcohol levels, revealing potential correlations and non-linear relationships. The box plot effe
visualization str	"Box plot of 'quality' vs. 'alcohol', with 'alcohol' categorized into quantiles."



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\*\foralload Chart \*\*



## \* Insight 1:

main() Goal Goal(question="What is the correlation between 'fixed acidity', 'volatile
acidity', and 'citric acid', and how does this relationship influence 'quality'?",
visualization="3D scatter plot of 'fixed acidity', 'volatile acidity', and 'citric
acid', with points colored by 'quality'.", rationale="This e...

A visualization goal	
index int	1
question str	"What is the correlation between 'fixed acidity', 'volatile acidity', and 'citric acid', and how does this relationship influence 'quality'?"
rationale str	"This explores the multi-dimensional relationship between three key chemical properties and wine quality. The 3D scatter plot allows for visualization of potential clusters or patterns in the data, revealing how different combinations of these acids might relate to wine quality. Color-coding by 'qu
visualization str	"3D scatter plot of 'fixed acidity', 'volatile acidity', and 'citric acid', with points colored by 'quality'."

### **★** Insight 2:

main() Goal Goal(question="Is there a non-linear relationship between 'residual sugar'
and 'density', and how does this affect 'quality'?", visualization="Scatter plot of
'residual sugar' vs. 'density', with points colored and sized by 'quality'.",
rationale="This investigates the relationship between sugar con...

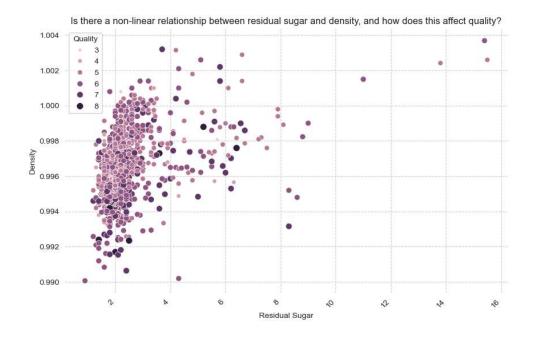
A visualization goal

index int	2

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#### NTViz

question str	"Is there a non-linear relationship between 'residual sugar' and 'density', and how does this affect 'quality'?"
rationale str	"This investigates the relationship between sugar content and density, which are expected to be correlated. The scatter plot will reveal the strength and direction of the correlation. Color and size coding by 'quality' will help identify if specific quality levels are associated with particular re
visualization str	"Scatter plot of 'residual sugar' vs. 'density', with points colored and sized by 'quality'."



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



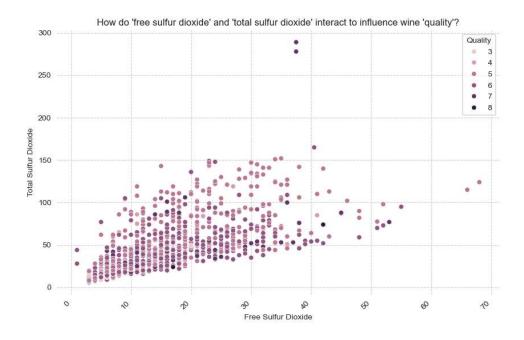
# **★** Insight 3:

#### NTViz

main() Goal Goal(question="How do 'free sulfur dioxide' and 'total sulfur dioxide'
interact to influence wine 'quality'?", visualization="Scatter plot of 'free sulfur
dioxide' vs. 'total sulfur dioxide', with points colored by 'quality' and potentially
using density to represent the count of samples in each reg...

#### A visualization goal

"How do 'free sulfur dioxide' and 'total sulfur dioxide' interact to
influence wine 'quality'?"
"This examines the combined effect of different forms of sulfur dioxide on wine quality. The scatter plot will show the relationship between these two variables. Color-coding by 'quality' and using density to show sample concentration will highlight areas where specific quality levels are more pre
"Scatter plot of 'free sulfur dioxide' vs. 'total sulfur dioxide', with points colored by 'quality' and potentially using density to represent the count of samples in each region."



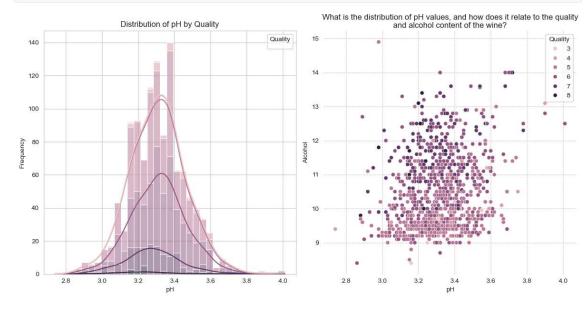
### \*\* 「つ・・・?つ Download Chart \*\*

VizOps <</p>

# \* Insight 4:

main() Goal Goal(question="What is the distribution of 'pH' values, and how does it
relate to the 'quality' and 'alcohol' content of the wine?", visualization="Histogram of
'pH' with overlaid density curves for different 'quality' levels, and a secondary plot
showing the relationship between 'pH' and 'alcohol'....

A visualization goal	
index int	4
question str	"What is the distribution of 'pH' values, and how does it relate to the 'quality' and 'alcohol' content of the wine?"
rationale str	"This explores the distribution of pH and its relationship with quality and alcohol content. The histogram with overlaid density curves will show the distribution of pH for each quality level, highlighting potential differences. A secondary scatter plot of 'pH' vs. 'alcohol' will further investigat
visualization str	"Histogram of 'pH' with overlaid density curves for different 'quality' levels, and a secondary plot showing the relationship between 'pH' and 'alcohol'."



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