Why are we using Boxplots and Violin Plots   
Boxplots to see the data and values distributed around the median

Violin Plot to get a deeper understanding of the distribution and the density of our data

**Summary of Discoveries:**

1. Resting BP (Resting Blood Pressure):

- Correlation Coefficient: 0.48

- Interpretation: This is a moderately strong positive correlation with CVD. Higher resting blood pressure is associated with a higher likelihood of having cardiovascular disease. This variable is statistically significant and stands out as a potential key factor in predicting CVD.

2. Serum Cholesterol:

- Correlation Coefficient: 0.20

- Interpretation: This is a weak positive correlation with CVD. While serum cholesterol does show some association with CVD, it’s not a particularly strong relationship. However, it is statistically significant, so it’s still a relevant variable to consider.

3. Max Heart Rate:

- Correlation Coefficient: 0.23

- Interpretation: This is also a weak-to-moderate positive correlation with CVD. People with higher maximum heart rates tend to have a slightly higher likelihood of cardiovascular disease, but the strength of the relationship is not very high. Like serum cholesterol, this is statistically significant, but weak.

4. Age:

- Correlation Coefficient: 0.008

- Interpretation: This is an extremely weak correlation and is statistically insignificant. Both the visual plots (boxplot and violin plot) and the correlation matrix indicate that age has no meaningful relationship with the presence of cardiovascular disease in this dataset.

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What We Have Discovered:

- Resting BP is the most important factor in your dataset that correlates with cardiovascular disease.

- Serum Cholesterol and Max Heart Rate show weak but statistically significant correlations with CVD.

- Age does not have a significant relationship with CVD in this dataset.

Key Takeaway:

Weve found that Resting BP has a relatively strong relationship with cardiovascular disease, while Serum Cholesterol and Max Heart Rate are also relevant, albeit weaker predictors. Age is not a meaningful factor based on the current analysis.