

# TITLE by YOUR\_NAME\_HERE

## Univariate Plots Section

```
## [1] 4898
```

```
## [1] 12
```

```
## 'data.frame': 4898 obs. of 12 variables:
## $ fixed.acidity : num 7 6.3 8.1 7.2 7.2 8.1 6.2 7 6.3 8.1 ...
## $ volatile.acidity : num 0.27 0.3 0.28 0.23 0.23 0.28 0.32 0.27 0.3 0.22 ...
## $ citric.acid : num 0.36 0.34 0.4 0.32 0.32 0.4 0.16 0.36 0.34 0.43 ...
## $ residual.sugar : num 20.7 1.6 6.9 8.5 8.5 6.9 7 20.7 1.6 1.5 ...
## $ chlorides : num 0.045 0.049 0.05 0.058 0.058 0.05 0.045 0.045 0.049 0.044 ...
## $ free.sulfur.dioxide : num 45 14 30 47 47 30 30 45 14 28 ...
## $ total.sulfur.dioxide: num 170 132 97 186 186 97 136 170 132 129 ...
## $ density : num 1.001 0.994 0.995 0.996 0.996 ...
## $ pH : num 3 3.3 3.26 3.19 3.19 3.26 3.18 3 3.3 3.22 ...
## $ sulphates : num 0.45 0.49 0.44 0.4 0.4 0.44 0.47 0.45 0.49 0.45 ...
## $ alcohol : num 8.8 9.5 10.1 9.9 9.9 10.1 9.6 8.8 9.5 11 ...
## $ quality : int 6 6 6 6 6 6 6 6 6 6 ...
```

```
## fixed.acidity volatile.acidity citric.acid residual.sugar
## Min. : 3.800 Min. :0.0800 Min. :0.0000 Min. : 0.600
## 1st Qu.: 6.300 1st Qu.:0.2100 1st Qu.:0.2700 1st Qu.: 1.700
## Median : 6.800 Median :0.2600 Median :0.3200 Median : 5.200
## Mean : 6.855 Mean :0.2782 Mean :0.3342 Mean : 6.391
## 3rd Qu.: 7.300 3rd Qu.:0.3200 3rd Qu.:0.3900 3rd Qu.: 9.900
## Max. :14.200 Max. :1.1000 Max. :1.6600 Max. :65.800
## chlorides free.sulfur.dioxide total.sulfur.dioxide
## Min. :0.00900 Min. : 2.00 Min. : 9.0
## 1st Qu.:0.03600 1st Qu.: 23.00 1st Qu.:108.0
## Median :0.04300 Median : 34.00 Median :134.0
## Mean :0.04577 Mean : 35.31 Mean :138.4
## 3rd Qu.:0.05000 3rd Qu.: 46.00 3rd Qu.:167.0
## Max. :0.34600 Max. :289.00 Max. :440.0
## density pH sulphates alcohol
## Min. :0.9871 Min. :2.720 Min. :0.2200 Min. : 8.00
## 1st Qu.:0.9917 1st Qu.:3.090 1st Qu.:0.4100 1st Qu.: 9.50
## Median :0.9937 Median :3.180 Median :0.4700 Median :10.40
## Mean :0.9940 Mean :3.188 Mean :0.4898 Mean :10.51
## 3rd Qu.:0.9961 3rd Qu.:3.280 3rd Qu.:0.5500 3rd Qu.:11.40
## Max. :1.0390 Max. :3.820 Max. :1.0800 Max. :14.20
## quality
## Min. :3.000
## 1st Qu.:5.000
## Median :6.000
## Mean :5.878
## 3rd Qu.:6.000
## Max. :9.000
```

## Univariate Analysis

What is the structure of your dataset?

What is/are the main feature(s) of interest in your dataset?

What other features in the dataset do you think will help support your investigation into your feature(s) of interest?

Did you create any new variables from existing variables in the dataset?

Of the features you investigated, were there any unusual distributions? Did you perform any operations on the data to tidy, adjust, or change the form of the data? If so, why did you do this?

## Bivariate Plots Section

### Bivariate Analysis

Talk about some of the relationships you observed in this part of the investigation. How did the feature(s) of interest vary with other features in the dataset?

Did you observe any interesting relationships between the other features (not the main feature(s) of interest)?

What was the strongest relationship you found?

## Multivariate Plots Section

### Multivariate Analysis

Talk about some of the relationships you observed in this part of the investigation. Were there features that strengthened each other in terms of looking at your feature(s) of interest?

Were there any interesting or surprising interactions between features?

OPTIONAL: Did you create any models with your dataset? Discuss the strengths and limitations of your model.

---

## Final Plots and Summary

Plot One

Description One

Plot Two

Description Two

Plot Three

Description Three

---

## Reflection