Maxwell Lee

Q5. A screenshot of a cell phone

Description automatically generated

A screenshot of a cell phone

Description automatically generated

Q7. A screenshot of a cell phone

Description automatically generated

Q9. A close up of a map

Description automatically generated

Q10. I would choose 6 clusters, as after 6 there is minimal decrease in the inertia. Additionally, there are 6 given quality values, so choosing 6 clusters is a reasonable number of ways to split the data.

Q11. A screenshot of a cell phone

Description automatically generated

Q13.

A screenshot of a cell phone

Description automatically generated

This crosstab shows that the cluster is an okay representation of quality of wine. Wines with a lower cluster number are generally more concentrated into a lower quality number and wines with a higher cluster number are generally concentrated into higher quality of wine. However, the results are not as clear as desired. Ideally, this crosstab would resemble a diagonally dominant matrix, or at least have one cluster quality combination that is clearly dominant for each row/column. This is not the case, so the cluster classification is not an excellent representation of quality.