TASK SHEET

1. Plot a 3D surface plot showing the relationship between math scores, reading scores, and writing scores, with the color representing the average score across the three subjects.
2. Create a dendrogram showing the hierarchical clustering of students based on their scores, with the color representing their test preparation completion status.
3. Generate a violin plot for math scores grouped by lunch types and parental level of education, with the width of the violins scaled by the number of students in each group.
4. Plot a ternary contour plot showing the density of students based on their average scores in math, reading, and writing.
5. Create a radar chart comparing the average scores for each subject (math, reading, writing) across different race/ethnicity groups.
6. Generate a network graph showing the connections between students who have similar score distributions, with edge thickness representing the similarity between students.
7. Plot a streamplot showing the change in scores over time for students who completed the test preparation course, with time represented by lunch type.
8. Create a parallel coordinates plot to visualize the distribution of scores across different subjects for each student, with lines colored by their race/ethnicity.
9. Generate a Sankey diagram illustrating the flow of students from different parental levels of education through different lunch types.
10. Plot a 3D scatter plot showing the relationship between math, reading, and writing scores, with marker size representing the average score across the three subjects.
11. Create a heatmap showing the correlation matrix between math, reading, and writing scores, with annotations displaying the correlation coefficients.
12. Generate a dendrogram showing the hierarchical clustering of students based on their scores, with the color representing their race/ethnicity.
13. Plot a chord diagram showing the relationships between different parental levels of education based on their average scores.
14. Create a contour plot showing the density of math scores based on reading scores, with a kernel density estimate overlaid.
15. Generate a scatter plot matrix showing the relationships between math, reading, and writing scores, with KDE plots for each variable along the diagonal.