

Test

(Q1 to Q10 -4 Marks each, Q11 & Q12-10 Marks, Q13 - 20 Marks)

1. **Bar Plot:** Show the total number of goals scored by each team (home and away combined). (fifa_matches dataset)
2. **Bar Plot:** Show the number of yellow cards received by each team during the tournament. (fifa_matches dataset)
3. **Box Plot:** Show the distribution of scores (home_score and away_score) for all teams. (Use subplots of matplotlib or seaborn). (fifa_matches dataset)
4. **Stacked Bar Plot:** Display the number of wins, draws, and losses for all home teams. (fifa_matches dataset)
5. **Pie Chart:** Show the number of times country becomes champion. (fifa_matches dataset)
6. **Pie Chart:** Show the number of times country becomes runner up. (fifa_matches dataset)
7. **Subplots:** Visualizing Numerical Data Distributions Using KDE Plots. (covid dataset)
8. **Scatter Plot:** Plot Birth_Weight against Birth_Length to visualize any relationship between the two variables. . (covid dataset)
9. **3D Scatter Plot:** Create a 3D scatter plot to visualize the relationship between Maternal_Age, Gestational_Age_At_Birth, and Birth_Weight. . (covid dataset)
10. **Subplots with Categorical Hue:** Create subplots that compare Maternal_Age, Birth_Length, and Birth_Weight while coloring points based on Household_Income categories. (covid dataset)
11. Create a pairplot of the dataset that includes Maternal_Age, Birth_Length, Birth_Weight, and Gestational_Age_At_Birth as the variables to compare. Add the hue parameter to color the plots based on Household_Income categories.
12. Use JointGrid to create a customized grid showing the relationship between Birth_Length and Gestational_Age_At_Birth (convert weeks into months one month=4.33 week). Add scatter plots to the joint axes and KDE plots to the marginal axes
13. Find out each team's year-wise participation in FIFA. Given a dataset containing FIFA match details, create a heatmap using Seaborn to visualize the year-wise participation of each team. The dataset contains columns such as home_team, away_team, and Year. Combine the participation of both home and away teams, then group the data by Year and team. Finally, display the heatmap where the x-axis represents the year, the y-axis represents the team, and the color intensity reflects the number of participations.