

- **Impact of Hours Studied on Performance**

You can use Plotly for interactive visualizations. It allows you to create interactive bar graphs, scatter plots, and more.

Code: import plotly.express as px

```
fig = px.scatter(df, x='Hours_Studied', y='Exam_Score', color='School_Type')  
fig.show()
```

- **Effect of Attendance on Performance**

Create a bar plot or box plot to compare Attendance and Exam_Score.

- **Influence of Parental Involvement on Performance**

Use a bar plot to compare levels of Parental_Involvement and the corresponding Exam_Score.

- **Access to Resources and Performance**

A violin plot or box plot can be used to show the distribution of Exam_Score across different levels of Access_to_Resources.

- **Effect of Sleep Hours on Performance**

Use a line plot to display the trend between Sleep_Hours and Exam_Score.

- **Impact of Internet Access on Performance**

A bar plot showing Internet_Access and average Exam_Score can highlight differences.

- **Effect of Family Income on Performance**

Use a scatter plot or box plot to visualize the relationship between Family_Income and Exam_Score.

- **Teacher Quality and Performance**

A bar plot or box plot comparing Teacher_Quality and Exam_Score will show any differences.

- **School Type and Performance**

A box plot comparing School_Type and Exam_Score can show differences in performance across school types.

- **Normal Distribution**

To visualize the distribution of a continuous variable like Exam_Score, you can use a histogram with a fitted normal distribution curve.

- **Box (Whisker) Plot**

Box plots are ideal for comparing the spread and outliers of numerical data across different categories, like Teacher_Quality.

Code: sns.boxplot(x='Teacher_Quality', y='Exam_Score', data=df)

- **Pie Chart**

You can use a PieChart to show proportion of categorical variables in our Performance_Category Table