2.

Given dataset studentperformance.csv has 7 columns with almost 1000 records.

Project Structure:

A screenshot of a computer

Description automatically generated

Initially I preprocessed the data and performed analysis on the clean data for better visualization.

I have performed different visualizations on this dataset.

**Visualization1:**

In the first visualization I have taken gender on the X axis and on Y axis test preparation course and used bar plot from matplotlib and this bar chart shows distribution of the gender (male/female) on test preparation course (0/1)

A blue rectangular object with white text

Description automatically generated

**Visualization2:**

In this second visualization I have used Facet Grid from SNS to visualize data on gender

With result score (math score, reading score, writing score).

**A graph of a person and person

Description automatically generated**

**Visualization3:**

In 3 visualization I have used histogram from matplotlib to shows the feature race/ethnicity

A graph of blue bars

Description automatically generated with medium confidence

**Visualization4:**

In this visualization I have used box plot from matplotlib to distribution on test preparation course over result score

A diagram of a test preparation course

Description automatically generated

**Visualization5:**

In the last visualization I have used scatter plot from matlplot lib to visualize test preparation course on both reading score and math score

In the below image yellow shows, the ones who haven’t had any test preparation course and other shows who have completed the course

A graph showing a number of dots

Description automatically generated