ASSIGNMENT 1 UJWALA DAMA (16334377)

QUESTION 2:

The performance data for the student has 7 column with 1000 observations.

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Student Performance Dataset

This Dataset contains the records related to student's performance and scores under different sections along with the different categories they belongs. This dataset contains 7 features with 1000 records includes:

Gender-represented the gender of students as Female/male.

Race/ethnicity - represents the groups (A,B,C,D) to which each individual student belongs. parental level of education - represents the education qualifications of students parent.

lunch - representing the type of lunch provided to students (standard/free/reduced)

test preparation course - represents whether the students have taken any course for test or not.

math score - represents score obtained in maths in numerical value.

reading score - represents score obtained in reading subject in numerical values.

writing score - represents score obtained in writing subject in numerical values.

Visualization 1:

Let's create a box plot graph where the y-axis represents topic scores and the x-axis represents gender.

A screenshot of a computer

Description automatically generated

A group of graphs with numbers

Description automatically generated with medium confidence

**Analysis outcome:**

From this box plot illustration, we may deduce that male students fared better in maths than female students in both writing and reading, but that male students performed better in maths than female students in both writing and reading. When the whole score was taken into account, female students fared better than male students.

Visualization2:

Let's create a scatter graph using the math scores of the male and female students on the x-axis and the reading scores on the y-axis.

A screen shot of a computer

Description automatically generated

A graph of different colored dots

Description automatically generated

Outcome: This scatter graph clearly shows that male students score better than female students in maths, while female students perform better than male students in reading.

Visualization3:

Distribution of Race/Ethnicity Among Students Whose Parents Have a Bachelor's Degree

A screenshot of a computer

Description automatically generated

A pie chart with different colored circles

Description automatically generated

Outcome: Group c has more percentage than any other group who’s parent have bachelor degree.

Visualization 4:

Visual comparison between math and reading score

A screen shot of a computer

Description automatically generated

A graph with blue dots

Description automatically generated

This graph shows the comparison between math score and redaing score

Visualization 5:

Calculating the average math score for each race

Analysis:

This bar chart plots the average math score with race calculating the mean average. So. Group E has the highest average math score.

A computer code with many colorful text

Description automatically generated with medium confidence

A graph of a number of people

Description automatically generated