Introduction to Data Management(INT-217)

PROJECT REPORT

(Project Semester August-December 2022)

"Students Performance in Exams"

Submitted by

Somay Tamboli

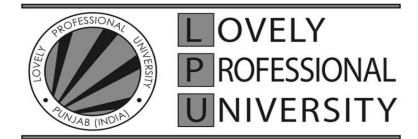
Registration No. - 12004583

Programme and Section – KM006 Course Code – INT-217

Under the Guidance of

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Discipline of CSE/IT Lovely School of Computer Science and Engineering Lovely Professional University, Phagwara



CERTIFICATE

This is to certify that Somay Tamboli bearing Registration no. 12004583 has

completed INT-217 project titled, "Students Performance in Exams" under

my guidance and supervision. To the best of my knowledge, the present work

is the result of his/her original development, effort and study.

Lovely School of Computer Science and Engineering

Lovely Professional University

Phagwara, Punjab.

Date: 06-11-22

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DECLARATION

I, Somay Tamboli, student of B.Tech under CSE/IT Discipline at, Lovely

Professional University, Punjab, hereby declare that all the information

furnished in this project report is based on my own intensive work and is

genuine.

Date: 6-11-22

Registration No. -12004583

Somay Tamboli

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Introduction

Excel is typically used to organize data and perform financial analysis. It is used across all business functions and at companies from small to large. The main uses of Excel include: Data entry, Data management, Accounting, Financial analysis, Charting and graphing, Programming, Time management, Task management, Financial modelling.

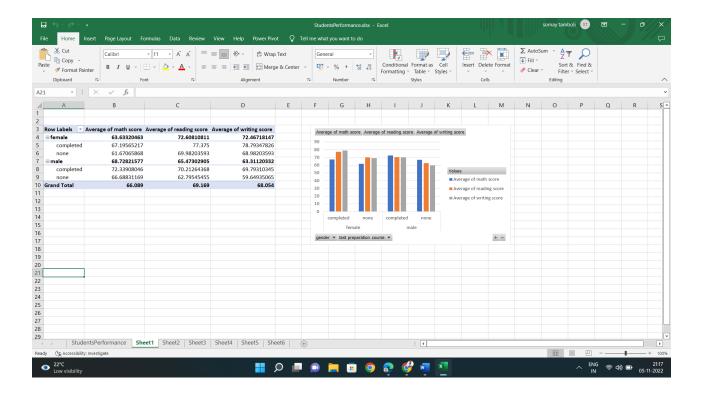
Power Pivot is an Excel add-in you can use to perform powerful data analysis and create sophisticated data models. With Power Pivot, you can mash up large volumes of data from various sources, perform information analysis rapidly, and share insights easily. A Pivot Table is used to summarise, sort, reorganise, group, count, total or average data stored in a table. It allows us to transform columns into rows and rows into columns. It allows grouping by any field (column), and using advanced calculations on them.

Objectives/Scope of the Analysis

The main objective of pivot table is that it helps to analyze the data with great ease. The data looking to big to just see can just fit in a small table and can be used as per the our will. There are also pivot graphs with which we can analyze the data graphically. To create pivot chart and pivot table and analyze the data.

Source of dataset

I downloaded this dataset from Kaggle and the link is here:https://www.kaggle.com/datasets/spscientist/students-performance-in-exams



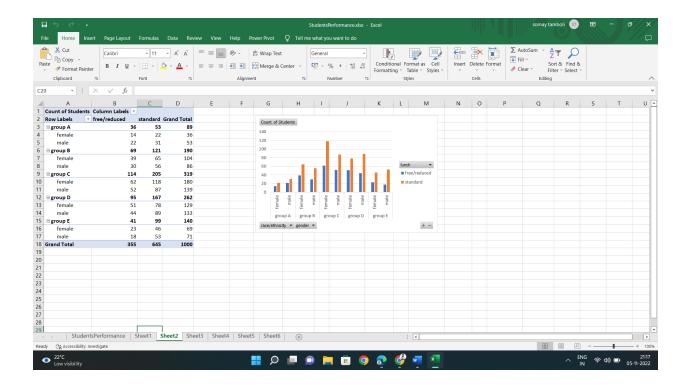
The Table in sheet 1 contains the data showing the average score of males and females of math, reading and writing according to their test preparation. Completed represents the score of student that has completed their test preparation and none represents the score of student who has not completed their test preparation.

The column graph in sheet 1 represents the same as mentioned above. The Blue column represents the average score of Math , Orange column represents the average score of Reading and Grey column represents the average score of Writing.

There are 2 filter options i.e. Gender, Test preparation course.

Gender – There are two options in this male/female by which we can select any of these and filter the male and female.

Test preparation course – With this we can filter the students who has completed the test preparation and who has not completed the test preparation.



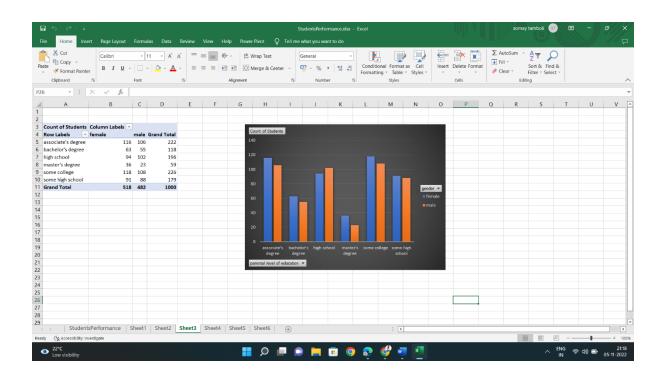
The Table in sheet 2 contains the data showing the number of male or female students according to their lunch type with respect to their Race/Ethnicity group.

The column graph in sheet 2 represents the same as mentioned above. The Blue column represents the students with free/reduced lunch type and Orange column represents the students with standard lunch type.

There are 2 filter options i.e. Gender, Race/Ethnicity.

Gender – There are two options in this male/female by which we can select any of these and filter the male and female.

Race/Ethnicity – With this we can filter the students according to their Ethnicity group.

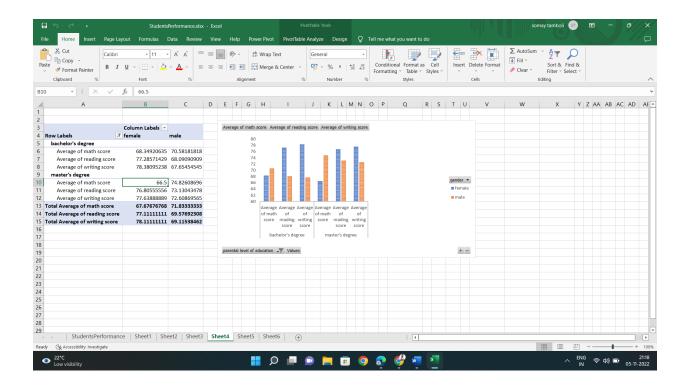


The Table in sheet 3 contains the data showing the number of male or female students according to their Parental level of education.

The column graph in sheet 3 represents the same as mentioned above. The Blue column represents the female students and Orange column represents the male students.

There is 1 filter option i.e. Parental level of education.

Parental level of education – With this we can filter the students according to their Parental education level that is Associate's Degree, Bechlor's Degree , High School Degree , Master's Degree and Some college and high school Degree.

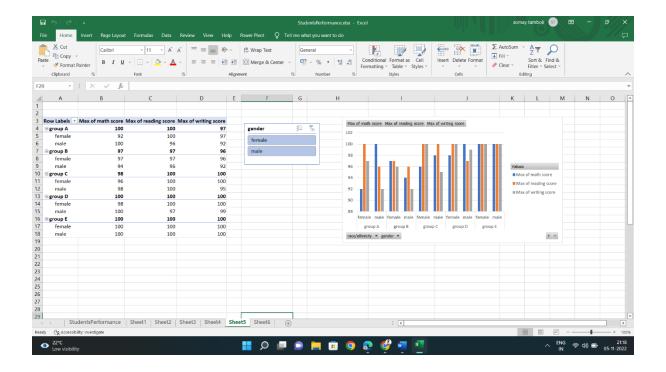


The Table in sheet 4 contains the data showing the Average score in Math, Reading and Writing of male or female students according to their Parental level of education of Bechlor's and Master's Degree only.

The column graph in sheet 4 represents the same as mentioned above. The Blue column represents the female students and Orange column represents the male students.

There is 1 filter option i.e. Parental level of education.

Parental level of education – With this we can filter the students according to their Parental education level that is Bechlor's Degree and Master's Degree only.



The Table(1) in sheet 5 contains the data showing the Max score in Math, Reading and Writing of male and female students according to their Race/Ethnicity group.

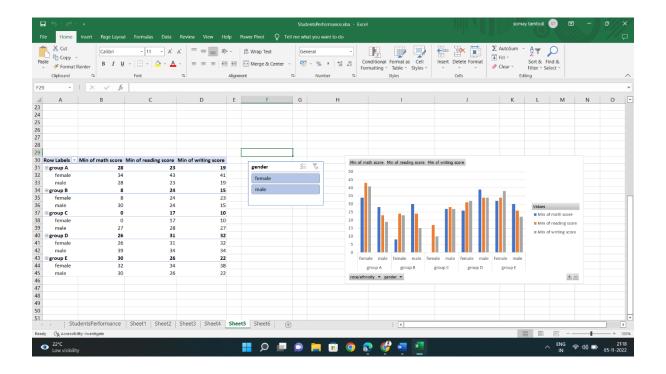
This Table(1) also has Slicer function in which we can filter the data in table according to gender type that is male and female.

The column graph(1) in sheet 5 represents the same as mentioned above. The Blue column represents the Max score of Math, Orange column represents the Max score of Reading and Grey column represents the Max score of Writing.

There are 2 filter options i.e. Gender, Race/Ethnicity.

Gender – There are two options in this male/female by which we can select any of these and filter the male and female.

Race/Ethnicity – With this we can filter the students according to their Ethnicity group.



The Table(2) in sheet 5 contains the data showing the Min score in Math, Reading and Writing of male and female students according to their Race/Ethnicity group.

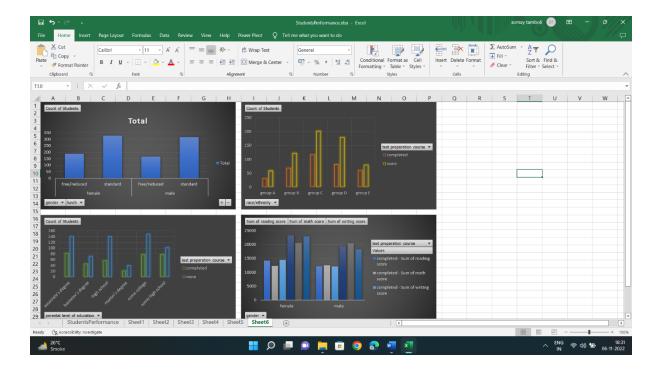
This Table(2) also has Slicer function in which we can filter the data in table according to gender type that is male and female.

The column graph(2) in sheet 5 represents the same as mentioned above. The Blue column represents the Min score of Math, Orange column represents the Min score of Reading and Grey column represents the Min score of Writing.

There are 2 filter options i.e. Gender, Race/Ethnicity.

Gender – There are two options in this male/female by which we can select any of these and filter the male and female.

Race/Ethnicity – With this we can filter the students according to their Ethnicity group.



This sheet contains a dashboard which is used to see four charts together in which the charts showing:-

- 1. It represents the number of male and female students according to their lunch type free/reduced and standard.
- 2. It represents the number of students who has completed and none(not completed) their test preparation according to their Parental level of education.
- 3. It represents the number of students who has completed and none(not completed) their test preparation according to their Race/Ethnicity group.
- 4. It represents the sum of score of Math, Reading and Writing according to male and female students who has completed and none(not completed) their test preparation.