EXP NO: 09	PERFORM DAX CALCULATIONS AND DESIGN A REPORT

AIM:

To load a dataset in Power BI, calculate total and average marks for students using DAX and design a report to analyze performance across subjects and gender.

TOOLS REQUIRED:

- Power BI Desktop
- Student marks dataset

ALGORITHM:

1. Load ‘student_data’ dataset into Power BI desktop.
2. Check columns, data types and remove unnecessary columns.
3. Create DAX measures for ‘Total_Marks’, ‘Average_Marks’, ‘Highest_Score’ and such.
4. Design the report by adding appropriate visualizations.
5. Save the dashboard, and export as required.

CODING:

DAX query to calculate Total_Marks:

```
Total_Marks = Sheet1[English] + Sheet1[Math] + Sheet1[Science] + Sheet1[Social Science] + Sheet1[Tamil]
```

DAX query to calculate Average_Marks:

```
Average_Marks = Sheet1[Total_Marks]/ 5
```

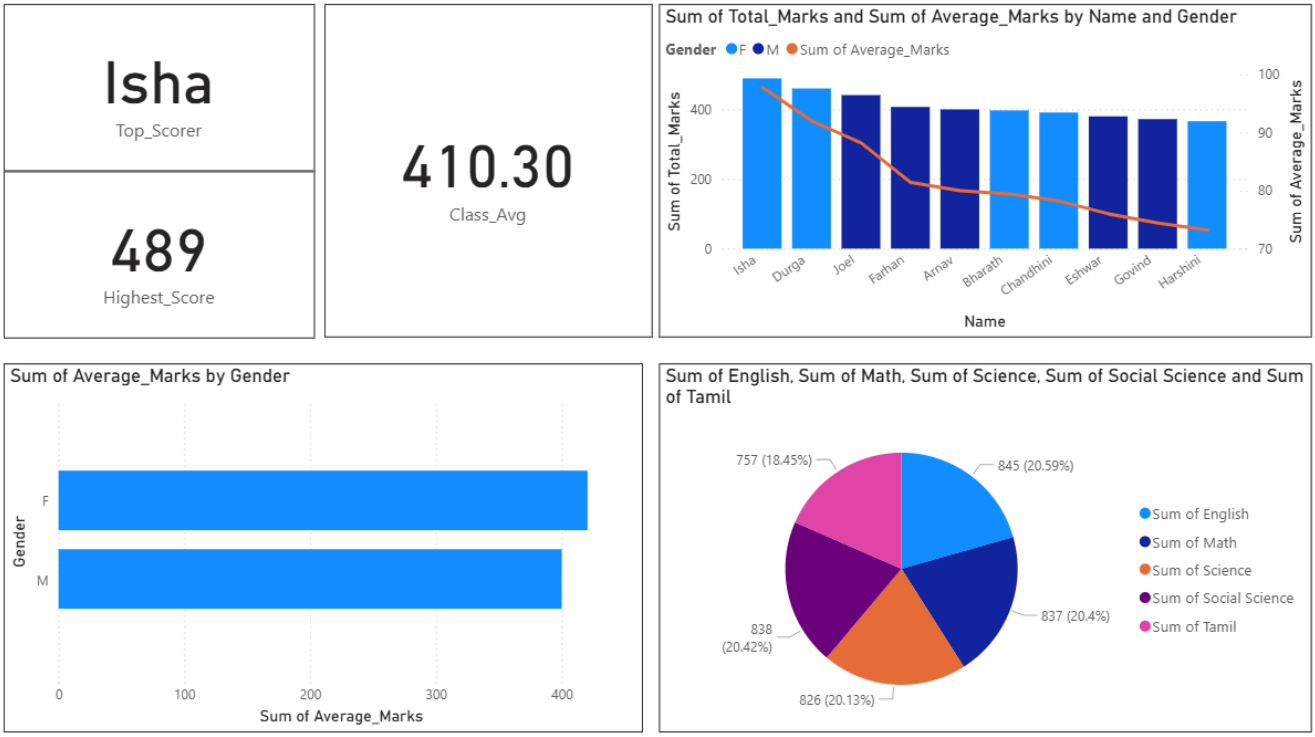
DAX query to calculate Highest_Score:

```
Highest_Score = MAXX(Sheet1, [Total_Marks])
```

DAX query to find Top_Scorer:

```
Top_Scorer = VAR TopStudent = TOPN(1, Sheet1, Sheet1[Total_Marks], DESC) RETURN CONCATENATEX(TopStudent, Sheet1[Name])
```

OUTPUT



RESULT

DAX measures were successfully applied to calculate Total Marks, Average Marks, and Highest Scorer. The report visually summarized student performance across subjects and gender. Interactive visuals enabled easy exploration and identification of trends and top performers.