EMPLOYEE DATA ANALYSIS

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Case Study

- We have two tables in our dataset,i.e,Table 1: Employeetable and Table 2:Fraud table.
- Each table contains different information on the employees.
- Table 1 contains 86 rows and and 9 columns whereas table 2 contains 59 rows and 8 columns.
- There are two common columns in table 1 and table 2.

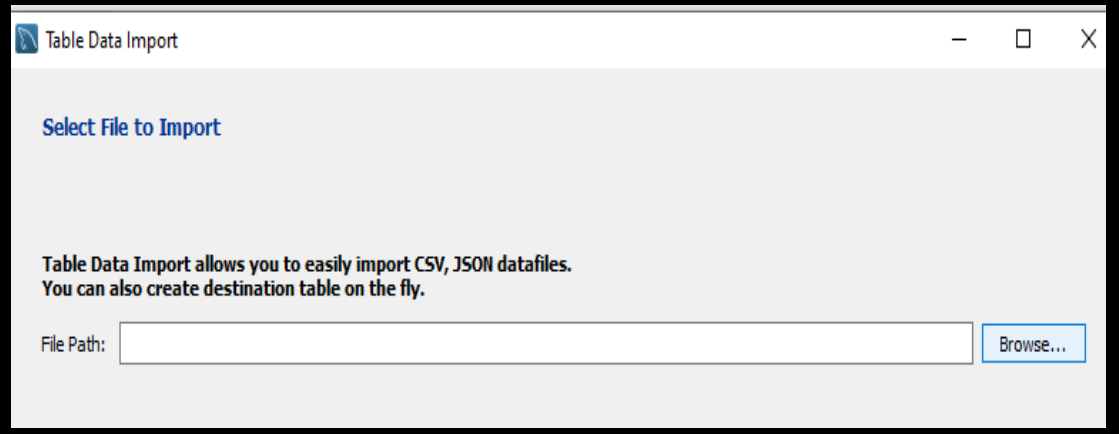
Objectives

- Analyzing the employee efficiency categorized by different factors.
- Fraud level analysis of employees based on different factors.

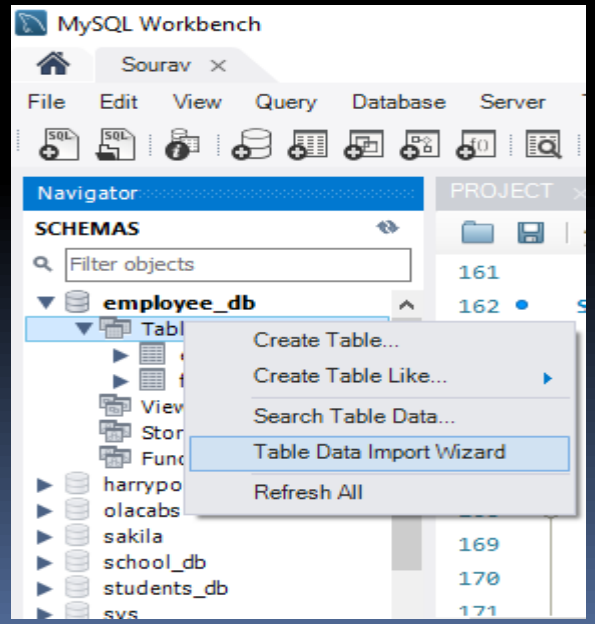
Business Optimization Factors

- Work efficiency of employees based on the cities.
- Fraud level analysis based on the countries.
- Fraud level analysis on different sectors.
- Employee capacity analysis on each sector.
- Gender wise employee count in each sector.
- Average annual salary analysis on different countries.
- Percentage of employee analysis on different age range with their average annual salary.

Uploading/Creating datasets in SQL

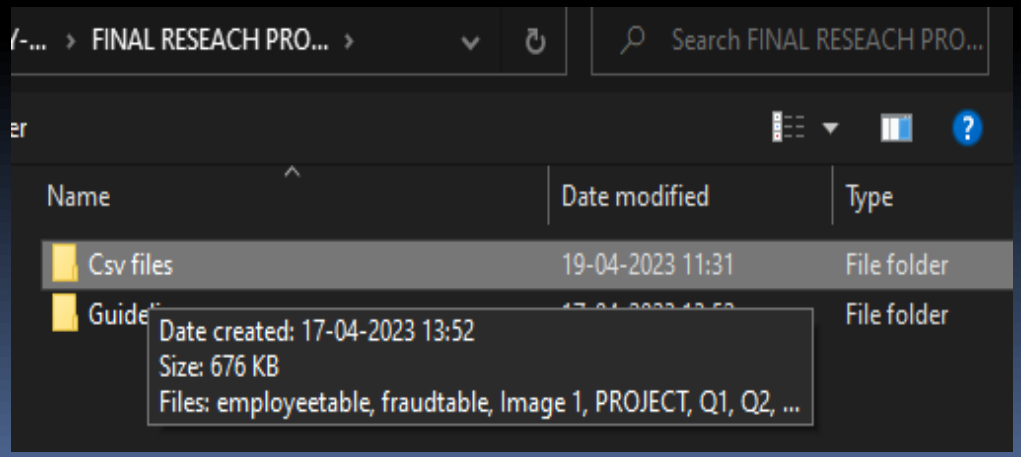


Step 2



Step 1

Step 3



City-wise work efficiency

Server Tools Scripting Help

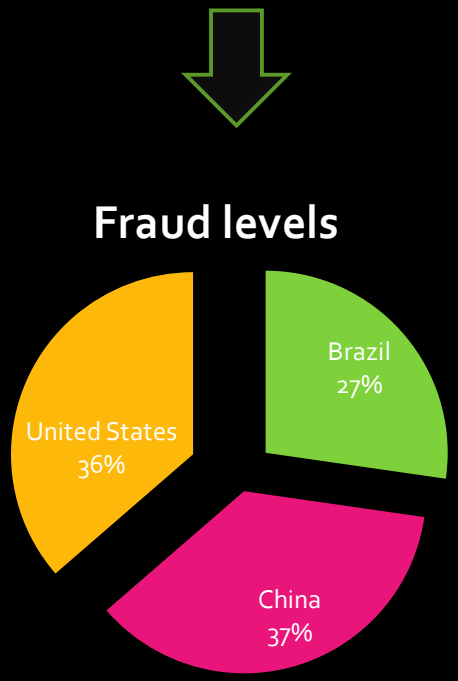
PROJECT* SQL File 5 Analysis codes(SQL)

Limit to 5000 rows

```
11
12      /*Analysis 1*/
13
14      Select distinct Round(Avg(Work_leave_score),2) as AverageEfficiency,City
15      From employeetable as e inner join fraudtable as f
16      on e.Employee_ID=f.Employee_ID
17      Group by City;
```

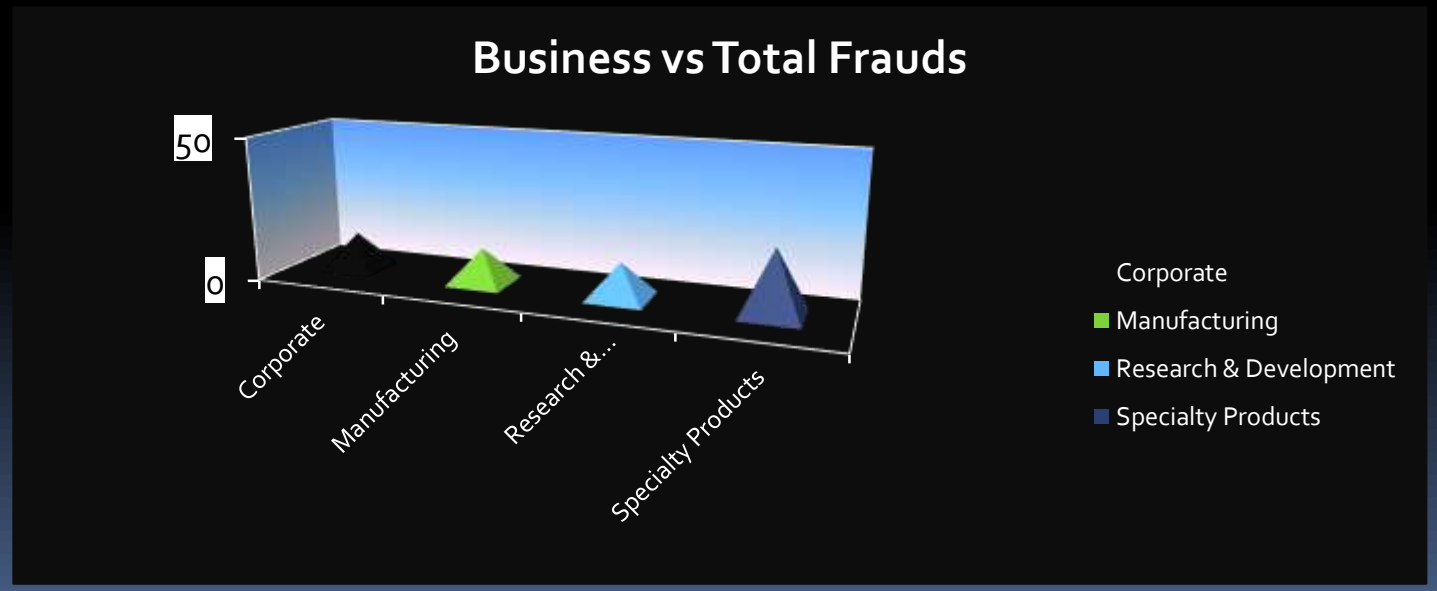
Country-wise fraud analysis

```
19      /*Analysis 2*/
20
21 •    Select distinct Country,Fraud_level
22      From employeetable as e inner join fraudtable as f
23      on e.Employee_ID=f.Employee_ID;
```



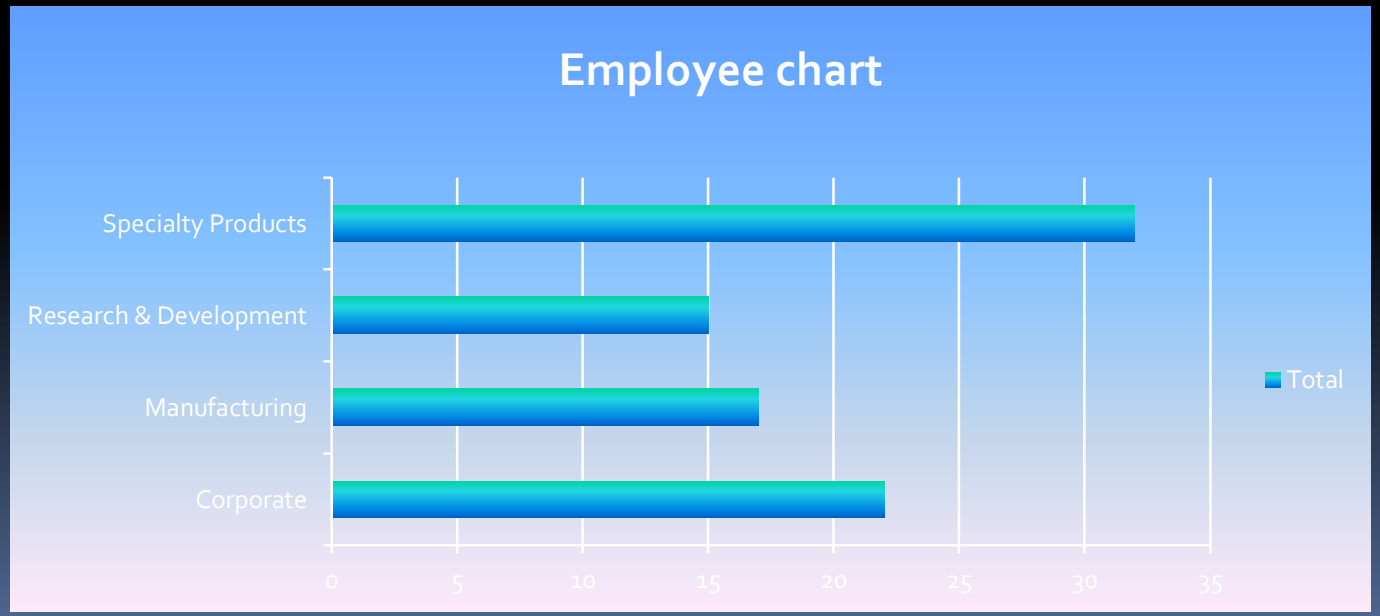
Sector-wise fraud analysis

```
25      /*Analysis 3*/
26
27 •    Select distinct Business,Count(Fraud_level) as TotalFrauds
28      From employeetable as e inner join fraudtable as f
29      on e.Employee_ID=f.Employee_ID
30      Group by Business;
```



Employee capacity in each sector

```
32      /*Analysis 4*/
33
34 ●    Select count(Gender) ,Business
35      From employeetable
36      group by Business;
```

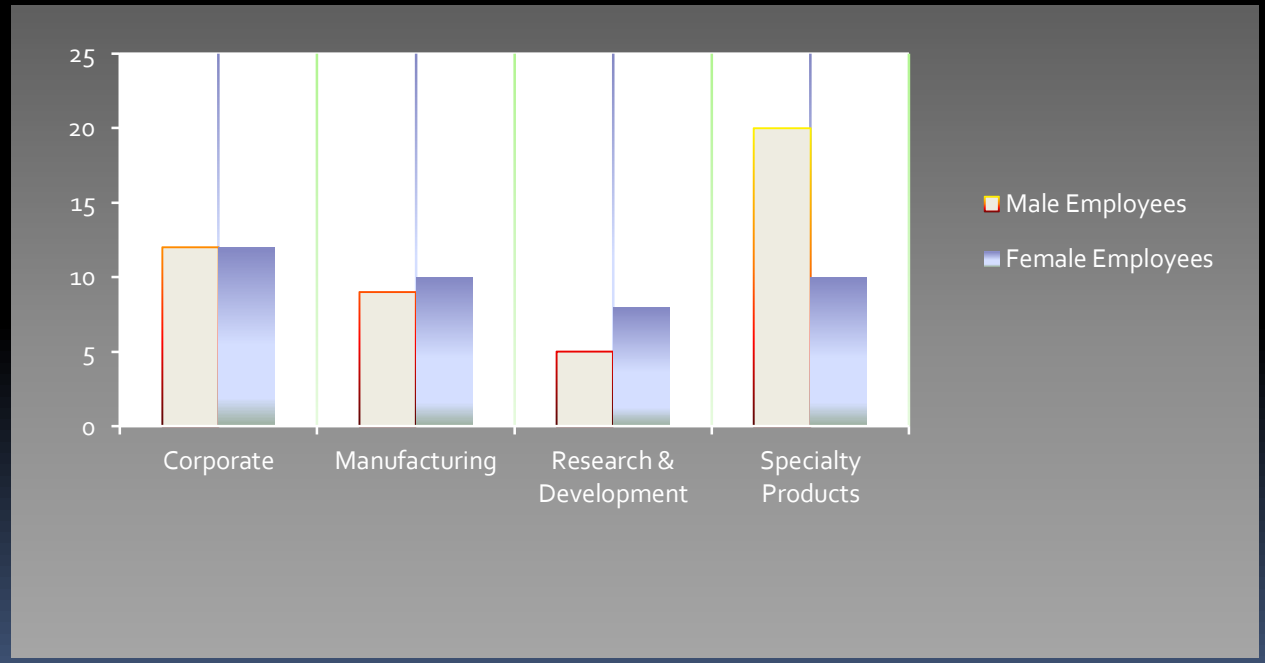


Gender count in each sector

```
/*Analysis 5*/

Select count(Gender) as MaleEmployees ,Business
From employeetable
Where Gender IN ('Male')
group by Business;
```

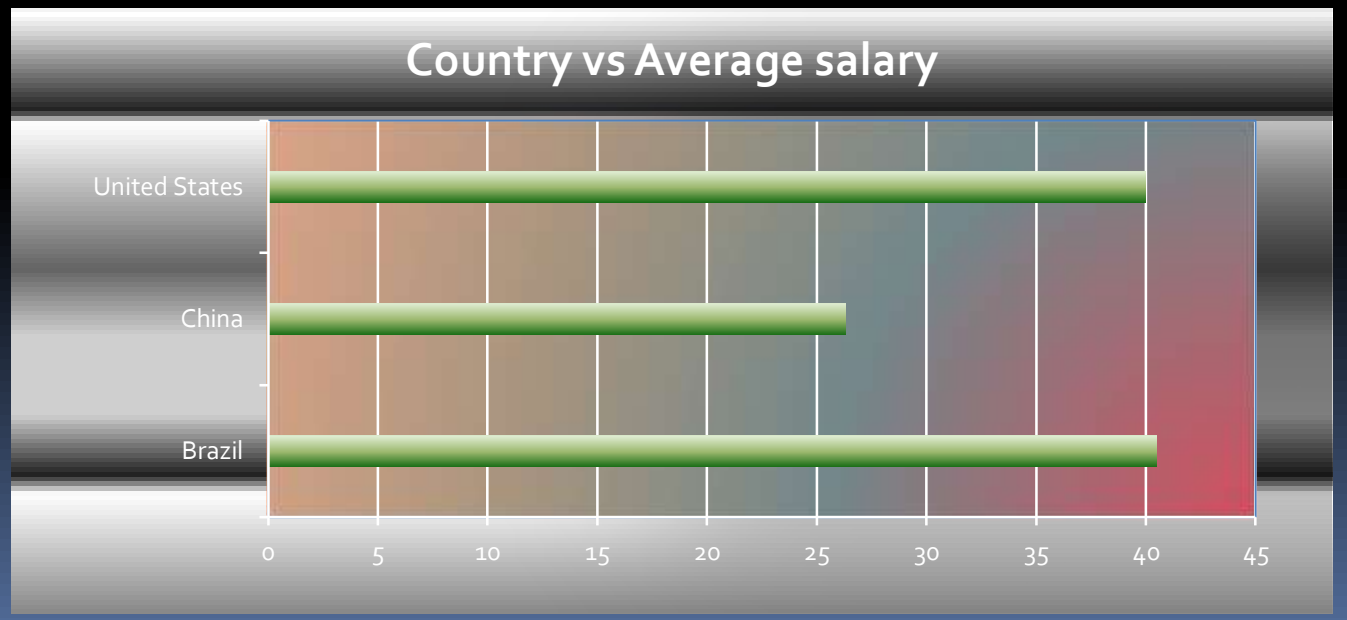
```
Select count(Gender) as FemaleEmployees ,Business
From employeetable
Where Gender IN ('Female')
group by Business;
```



Country-wise average annual salary

```
/*Analysis 6*/

Select Country,ROUND(avg(AnnualSalaryInDollar),2) Avgsalary
From employeetable as e inner join fraudtable as f
on e.Employee_ID=f.Employee_ID
Group by Country;
```



Percent-wise employee analysis based on age range and annual salary(Average)

```
/*Analysis 7*/

SELECT e.Agerange as Age_range,
    count(*) as Number_of_employees,
    Round( AVG(AnnualSalaryInDollar),2) AS "Average Salary In Dollar",
    Round(100 * COUNT(*) / SUM(COUNT(*)) OVER (),2) AS "% of employees"
    FROM
  (SELECT AnnualSalaryInDollar,
     CASE
       WHEN age >60  THEN '60 And Up'
       WHEN age >=41 and age <=60 THEN '41-60'
       WHEN age >=21 and age <=40 THEN '21-40'
       WHEN age <=20 THEN '20 And Below'
     END as agerange
   from employeetable as e inner join fraudtable as f
on e.Employee_ID=f.Employee_ID
 ) as e
group by e.Agerange;
```

Key Findings

- Highest average work efficiency is in- Beijing,66.
- Country with highest number of frauds-China,37%.
- Business sector with highest number of frauds- Specialty Products, 22.
- Highest number of employees- Specialty Products,32.
- Highest and lowest number of male employees-Specialty Products and 'Research & Development whereas the same for female employees-Specialty Products and Manufacturing.
- Country with highest average annual salary-Brazil.
- Highest number of employees-Age range '41-60' whereas highest amount of average annual salary-age range '21-40'.

THANK YOU