/\* Calculated Salary=Basepay+Bonus) \*/

SELECT JobTitle, Gender, Age, PerfEval, Education, Dept, Seniority, BasePay, Bonus, (BasePay + Bonus) AS Salary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table` ;

/\* Salary gap between Male and Female \*/

SELECT CAST(ABS(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) - AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END)) AS INT) AS SalaryGap

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`;

/\* Salary gap in percentage \*/

SELECT

ROUND(

(ABS(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) - AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END)) /

NULLIF(AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END), 0)) \* 100, 2) AS SalaryGapPercentage

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`;

/\* Avearge Salary of male and Female \*/

SELECT 'Male' AS Gender, CAST(AVG(CASE WHEN Gender = 'Male' THEN (BasePay + Bonus) ELSE 0 END) AS INT) AS AvgSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

UNION ALL

SELECT 'Female' AS Gender, CAST(AVG(CASE WHEN Gender = 'Female' THEN (BasePay + Bonus) ELSE 0 END) AS INT) AS AvgSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`;

/\* Impact of Education Level on Salary Per year \*/

SELECT Education, CAST(SUM(BasePay + Bonus) AS INT) AS TotalSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY Education;

/\* Average Salary Differnce Between male and Female for the same position \*/

SELECT JobTitle, Gender, CAST(ROUND(AVG(BasePay + Bonus)) AS INT) AS AvgSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY JobTitle, Gender;

/\* Effect of Age on salary for Male and Female by age \*/

SELECT Gender, Age, CAST(AVG(BasePay + Bonus) AS INT) AS AvgSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY Gender, Age;

/\* Average salary of male and Female in sepaarte coloumn as per JobTitle \*/

SELECT JobTitle,

CAST(SUM(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) AS INT) AS MaleSalary,

CAST(SUM(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END) AS INT) AS FemaleSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY JobTitle;

/\* Differnce between Salary of Male and Female as per Jobtitle and Department \*/

SELECT JobTitle,

Dept,

CAST(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) AS INT) AS AverageMaleSalary,

CAST(AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END) AS INT) AS AverageFemaleSalary,

CAST(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) - AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END) AS INT) AS SalaryDifference

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY JobTitle, Dept;

/\* Differnce between salary by Jobtitle, Deoartment , age and Gender \*/

SELECT JobTitle,

Dept,

Age,

CAST(ROUND(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END)) AS INT) AS MaleAverageSalary,

CAST(ROUND(AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END)) AS INT) AS FemaleAverageSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY JobTitle, Dept, Age;

/\* To analyze the relationship between seniority levels and salaries \*/

SELECT Seniority, CAST(AVG(BasePay + Bonus) AS INT) AS AverageSalary

FROM`glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY Seniority

ORDER BY Seniority;

/\* Impact of education Level on Male and Female by creating Separte columns \*/

SELECT Education,

CAST(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) AS INT) AS MaleAverageSalary,

CAST(AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END) AS INT) AS FemaleAverageSalary

FROM `glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY Education;

/\* Test \*/

SELECT

JobTitle,

Dept,

Age,

SUM(CASE WHEN Gender = 'Male' THEN 1 ELSE 0 END) AS MaleCount,

SUM(CASE WHEN Gender = 'Female' THEN 1 ELSE 0 END) AS FemaleCount,

COUNT(\*) AS TotalCount,

SUM(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END) AS MaleTotalSalary,

SUM(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END) AS FemaleTotalSalary,

CAST(ROUND(AVG(CASE WHEN Gender = 'Male' THEN BasePay + Bonus ELSE 0 END)) AS INT) AS MaleAverageSalary,

CAST(ROUND(AVG(CASE WHEN Gender = 'Female' THEN BasePay + Bonus ELSE 0 END)) AS INT) AS FemaleAverageSalary

FROM

`glassdoor-gender-pay-gap.Glassdoor\_Gender\_Gap\_Dataset.Glassdoor\_Gender\_Gap\_Table`

GROUP BY

JobTitle, Dept, Age;