

SQL Training, Session 1:

This lesson assumes that you have completed the w3 schools SQL tutorial up to SQL Wildcards and are familiar with the basic SQL syntax. We will be going over some problems together. There will be a project assigned at the end of the lesson.

The purpose of this lesson is to reinforce arithmetic operations, ordering, wildcards, and WHERE clauses.

The following exercises assume a table like the one shown below:

Emp_id	Emp_Name	Age	Annual_Salary	Tenure_YearsWorked
101	Sally Johnson	29	50000	1
102	Tom Brooks	45	80000	4
103	Tom Felton	27	50000	1
104	Jack Kelvin	55	85000	5
105	Beth George	35	70000	3

This table shows the age, employee name, Salary, and Tenure in the Company. You are an analyst working for HR and your boss asks you to pull the following reports.

- 1) Write a query that generates a table which displays the Employee ID, Employee Name, Age, Salary, and Company tenure ordered by company tenure decreasing.
- 2) Write a query that computes the average salary across the team.
- 3) Write a query that generates displays the Employee ID, Employee Name, Age, Salary, and Company tenure for employees that are older than 30. Sort the resulting table by Age in descending order.
- 4) We are given the annual salary of an employee. Write a query, using arithmetic that generates a table containing the employee id, employee name, and monthly salary. Round the monthly salary to only allow two decimal places.
- 5) The company gives a 5% bonus to each employee at the end of the year. Write a query to calculate the bonus each employee will receive at the end of the year. Your table

should just include employee ID, employee name, annual salary, and bonus_awarded. Round the bonus to the nearest whole dollar.

- 6) Write a query that generates employee id, employee name, and salary for everyone whose first name is Tom.
- 7) Write a query that generates the average salary grouped by tenure worked. Your table should produce tenure worked and average salary.

Homework:

The homework requires access to google BigQuery. You will submit your homework by uploading it as a .sql file to your personal github. You will then provide me the link to your personal github.

Your assignment can be found here:

<https://github.com/vindication09/Data-Science-Mathematics/blob/master/SQL/P9-Section5-The-Challenge.pdf>

In BigQuery, within the Media Data Science Project, locate the tutorials folder. The two datasets to complete this assignment are called condole_dates and console_games