craft four SQL business user questions (increased complexity) with a data set/table tech salaries, containing column names (year of work, level of experience, type of employment, designation, salary amount, salary in USD, Residence, ratio of remote work and company location)

Tech Datatype

1. What is the average salary for a software engineer with 5 years of experience working in a full-time position at a tech company in the United States?

SQL

SELECT AVG(salary\_amount)

FROM tech\_salaries

WHERE year\_of\_work = 5

AND level\_of\_experience = 'Software Engineer'

AND type\_of\_employment = 'Full-time'

AND residence = 'United States'

AND company\_location = 'United States';

1. What is the highest salary for a tech employee who works remotely?

SQL

SELECT MAX(salary\_amount)

FROM tech\_salaries

WHERE ratio\_of\_remote\_work = 1;

1. What is the average salary for a tech employee who works in the San Francisco Bay Area?

SQL

SELECT AVG(salary\_amount)

FROM tech\_salaries

WHERE company\_location = 'San Francisco Bay Area'

1. What is the difference in average salary between tech employees who work in the San Francisco Bay Area and tech employees who work in Seattle?

SQL

SELECT AVG(salary\_amount) AS average\_salary\_in\_san\_francisco\_bay\_area,

AVG(salary\_amount) AS average\_salary\_in\_seattle

FROM (

SELECT salary\_amount

FROM tech\_salaries

WHERE company\_location = 'San Francisco Bay Area'

) AS san\_francisco\_bay\_area\_salaries,

(

SELECT salary\_amount

FROM tech\_salaries

WHERE company\_location = 'Seattle'

) AS seattle\_salaries;

craft four SQL increased complexity business user questions with a data set/table boxing matches, containing column names (Name of fighter, number of wins, number of losses, number of draws K.O ratesfighter's age, fighter's height, fighter's country, and fighter's reach )

Boxing Datatype

1. Can you provide a list of fighters who have won at least 80% of their matches, with a minimum of 10 matches fought, and are from countries with an average fighter height above 180 cm?

SQL

SELECT name, wins, losses, draws, ko\_rate, age, height, country, reach

FROM boxing\_matches

WHERE wins / (wins + losses) >= 0.8

AND wins >= 10

AND (

SELECT AVG(height)

FROM boxing\_matches

WHERE country = fighter\_country

) > 180;

1. Could you retrieve the top 3 countries with the highest average K.O. rates among their fighters, considering only fighters with a minimum of 20 matches fought?

SQL

SELECT country, AVG(ko\_rate) AS average\_ko\_rate

FROM boxing\_matches

WHERE ko\_rate > 0

AND wins >= 20

GROUP BY country

ORDER BY average\_ko\_rate DESC

LIMIT 3;

1. What is the average age of fighters who have won at least 75% of their last 25 matches?

SQL

SELECT AVG(age) AS average\_age

FROM boxing\_matches

WHERE wins / (wins + losses) >= 0.75

AND date > CURRENT\_DATE - INTERVAL 25 DAY;

1. Can you give me the fighter(s) who have the highest win-loss ratio, considering only fighters aged between 25 and 35 years and with a minimum of 15 matches fought?

SQL

SELECT

name,

wins,

losses,

wins / (wins + losses) AS win\_loss\_ratio

FROM boxing\_matches

WHERE

age BETWEEN 25 AND 35

AND wins >= 15

ORDER BY

win\_loss\_ratio DESC;

craft four SQL increased complexity business user questions with a data set/table Loan Eligibility, containing column names (Loan\_ID, Gender, Married Sataus, Dependents, Education\_Level, Self\_Employed, Applicant\_Income, CoApplicant\_Income, Loan\_Amount and Loan\_Amount\_Terms)

Loan Eligibility

1. What is the average loan amount for married applicants with dependents?

SQL

SELECT AVG(Loan\_Amount)

FROM Loan\_Eligibility

WHERE Married\_Status = 'Yes'

AND Dependents > 0;

1. What is the percentage of applicants who are self-employed and have a loan amount of more than $50,000?

SQL

SELECT COUNT(CASE WHEN Self\_Employed = 'Yes'

AND Loan\_Amount > 50000 THEN 1 END) / COUNT(\*) \* 100 AS Percentage

FROM Loan\_Eligibility;

1. What is the maximum loan amount that has been approved for an applicant with no dependents?

SQL

SELECT MAX(Loan\_Amount)

FROM Loan\_Eligibility

WHERE Dependents = 0;

1. What is the average loan amount for applicants with a college degree?

SQL

SELECT AVG(Loan\_Amount)

FROM Loan\_Eligibility

WHERE Education\_Level = 'College Degree';