Exercises

**-- 1. Select firstname, lastname, title, age, salary for everyone in your employee table.**

SELECT \* FROM Employee;

**-- 2. Select firstname, age and salary for everyone in your employee table.**

SELECT FirstName, Age, Salary FROM Employee;

**-- 3. Select firstname and display as 'Name' for everyone in your employee table**

SELECT FirstName as Name FROM Employee;

**-- 4. Select firstname and lastname as 'Name' for everyone. Use " " (space) to separate firstname and last.**

SELECT CONCAT(FirstName,' ',LastName) AS Name FROM Employee;

**-- 5. Select all columns for everyone with a salary over 38000.**

SELECT \* FROM Employee WHERE Salary>38000;

**-- 6. Select first and last names for everyone that's under 24 years old.**

SELECT FirstName, LastName FROM Employee WHERE Age<24;

**-- 7. Select first name, last name, and salary for anyone with "Programmer" in their title.**

SELECT FirstName, LastName, Salary FROM Employee WHERE Title LIKE "%Programmer%";

**-- 8. Select all columns for everyone whose last name contains "O".**

SELECT \* FROM Employee WHERE LastName LIKE "%O%";

**-- 9. Select the lastname for everyone whose first name equals "Kelly".**

SELECT LastName FROM Employee WHERE FirstName = "Kelly";

**-- 10. Select all columns for everyone whose last name ends in "Moore".**

SELECT \* FROM Employee WHERE LastName LIKE "%Moore";

**-- 11. Select all columns for everyone who are 35 and above.**

SELECT \* FROM Employee WHERE Age>=35;

**-- 12. Select firstname ,lastname,age and salary of everyone whose age is above 24 and below 43.**

SELECT FirstName, LastName, Age, Salary FROM Employee WHERE Age BETWEEN 25 AND 42;

**-- 13. Select firstname, title and lastname whose age is in the range 28 and 62 and salary greater than 31250**

SELECT FirstName, Title, LastName FROM Employee

WHERE Age BETWEEN 28 AND 62

AND Salary > 31250;

**-- 14. Select all columns for everyone whose age is not more than 48 and salary not less than 21520**

SELECT \* FROM Employee

WHERE AGE<=48 AND SALARY>=21520;

**-- 15. Select firstname and age of everyone whose firstname starts with "John" and salary in the range 25000 and 35000**

SELECT FirstName, Age FROM Employee

WHERE FirstName LIKE "John%"

AND Salary BETWEEN 25000 AND 35000;

**-- 16. Select all columns for everyone by their ages in descending order.**

SELECT \* FROM Employee

ORDER BY Age DESC;

**-- 17. Select all columns for everyone by their ages in ascending order.**

SELECT \* FROM Employee

ORDER BY Age;

**-- 18. Select all columns for everyone by their salaries in descending order.**

SELECT \* FROM Employee

ORDER BY Salary DESC;

**-- 19. Select all columns for everyone by their salaries in ascending order.**

SELECT \* FROM Employee

ORDER BY Salary;

**-- 20. Select all columns for everyone by their salaries in ascending order whose age not less than 17.**

SELECT \* FROM Employee

WHERE Age >=17

ORDER BY Salary;

**-- 21. Select all columns for everyone by their salaries in descending order whose age not more than 34.**

SELECT \* FROM Employee

WHERE Age <=34

ORDER BY Salary DESC;

**-- 22. Select all columns for everyone by their length of firstname in ascending order.**

SELECT \* FROM Employee

ORDER BY LENGTH(FirstName);

**-- 23. Select the number of employees whose age is above 45**

SELECT COUNT(\*) FROM Employee WHERE Age>45;

**-- 24. Show the results by adding 5 to ages and removing 250 from salaries of all employees**

SELECT Age+5 AS NewAge , Salary-250 AS NewSAlary FROM Employee;

**-- 25. Select the number of employees whose lastname ends with "re" or "ri" or "ks"**

SELECT \* FROM Employee

WHERE LastName LIKE '%re'

OR LastName LIKE '%ri'

OR LastName LIKE '%ks';

**-- 26. Select the average salary of all your employees**

SELECT AVG(Salary) FROM Employee;

**-- 27. Select the average salary of Freshers**

SELECT AVG(Salary) FROM Employee WHERE Title = 'Fresher';

**-- 28. Select the average age of Programmers**

SELECT AVG(Salary) FROM Employee WHERE Title = 'Programmer';

**- 29. Select the average salary of employees whose age is not less than 35 and not more than 50**

SELECT AVG(Salary) FROM Employee WHERE Age BETWEEN 35 AND 50;

**-- 30. Select the number of Freshers**

SELECT COUNT(\*) FROM Employee WHERE Title = "Fresher";

**-- 31. What percentage of programmers constitute your employees**

SELECT SUM(Title = 'Programmer')\*100/COUNT(\*) AS PercentageProgrammer FROM Employee;

**-- 32. What is the combined salary that you need to pay to the employees whose age is not less than 40**

SELECT SUM(Salary) FROM Employee WHERE Age>=40;

**-- 33. What is the combined salary that you need to pay to all the Freshers and Programmers for 1 month**

SELECT SUM(Salary/12) FROM Employee WHERE Title='Programmer' OR Title='Fresher';

**-- 34. What is the combined salary that you need to pay to all the Freshers whose age is greater than 27 for 3years**

SELECT SUM(Salary\*3) AS three\_Year\_Salary FROM Employee WHERE Title = 'Fresher' AND Age>27;

**-- 35. Select the eldest employee's firstname, lastname and age whose salary is less than 35000**

SELECT FirstName, LastName, Age FROM Employee WHERE SALARY <35000

ORDER BY Age DESC

LIMIT 1;Output

**-- 36. Who is the youngest General Manager**

SELECT CONCAT(FirstName,' ',LastName) AS YoungName FROM Employee WHERE Title = 'General Manager'

ORDER BY AGE

LIMIT 2;

**-- 37. Select the eldest fresher whose salary is less than 35000**

SELECT CONCAT(FirstName,' ',LastName) AS OldFresherName FROM Employee WHERE Title='Fresher' AND Salary<35000

ORDER BY Age DESC

LIMIT 2;

**-- 38. Select firstname and age of everyone whose firstname starts with "John" or "Michael" and salary in the range 17000 and 26000**

SELECT FirstName, Age FROM Employee

WHERE

Salary BETWEEN 17000 AND 26000

AND

FirstName LIKE 'John%'

OR FirstName LIKE 'Michael%';

**-- 39. How many employees are having each unique title. Select the title and display the number of employees present in ascending order**

SELECT Title, Count(\*) as NumberOfEmployees FROM Employee

GROUP BY Title;

**-- 40. What is the average salary of each unique title of the employees. Select the title and display the average salary of employees in each**

SELECT Title, COUNT(\*) as NumberOfEmployees, SUM(Salary)/COUNT(\*) AS AverageSalary FROM Employee

GROUP BY Title;

**-- 41. What is the average salary of employees excluding Freshers**

SELECT SUM(Salary)/Count(\*) as AvgSalary FROM Employee

WHERE Title NOT IN('Fresher');

**-- 42. What is the average age of employees of each unique title**

SELECT Title,SUM(Age)/COUNT(\*) AS AverageAge FROM Employee

GROUP BY Title;

**-- 43. In the age range of 25 to 40 get the number of employees under each unique title.**

SELECT Title, COUNT(\*) AS NumberOfEmployees FROM Employee

GROUP BY Title

HAVING Age BETWEEN 25 AND 40;

**-- 44. Show the average salary of each unique title of employees only if the average salary is not less than 25000**

SELECT Title, AVG(SALARY) AS AvgSalary FROM Employee

GROUP BY Title

HAVING AvgSalary>=25000;

**-- 45. Show the sum of ages of each unique title of employee only if the sum of age is greater than 30**

SELECT Title, SUM(AGE) FROM Employee GROUP BY Title HAVING AVG(AGE)>30;

**-- 46. Lisa Ray just got married to Michael Moore. She has requested that her last name be updated to Moore.**

UPDATE Employee

SET LastName = Moore

WHERE FirstName = 'Lisa' AND LastName = 'Ray';

**-- 47. Ginger Finger's birthday is today, add 1 to his age and a bonus of 5000**

UPDATE Employee

SET Age = Age+1,Salary = Salary+5000

WHERE FirstName = 'Ginger' AND LastName = 'Finger';

**-- 48. All 'Programmer's are now called "Engineer"s. Update all titles accordingly.**

UPDATE Employee

SET Title = 'Engineer'

WHERE Title = 'Programmer';

**--49. Everyone whose making under 30000 are to receive a 3500 bonus.**

UPDATE Employee

SET Salary = Salary+ 3500

WHERE Salary<30000;

**--50. Everyone whose making over 35500 are to be deducted 15% of their salaries**

UPDATE Employee

SET Salary = Salary - (Salary\*15/100)

WHERE Salary>35500;