# **SQL Assignment – 1**

1. Write a query to display the names (first\_name, last\_name) using alias name

“First Name", "Last Name"...?

SELECT

first\_name AS 'First Name', last\_name AS 'Last Name'

FROM

hr. employees;

1. Write a query to get unique department ID from employee table...?

SELECT DISTINCT

(department\_id)

FROM

hr. employees;

1. Write a query to get all employee details from the employee table order by first name, descending...?

SELECT

\*

FROM

hr. employees

ORDER BY first\_name DESC;

1. Write a query to get the names (first\_name, last\_name), salary, PF of all the employees (PF is calculated as 15% of salary)...?

SELECT

first\_name, last\_name, salary, salary \* 0.15 AS PF

FROM

hr. employees;

1. Write a query to get the employee ID, names (first\_name, last\_name), salary in ascending order of salary...?

SELECT

employee\_id, first\_name, last\_name, salary

FROM

hr.employees

WHERE

employee\_id IS NOT NULL

ORDER BY salary;

1. Write a query to get the total salaries payable to employees...?

SELECT

SUM(salary) AS 'Sum of Total Salaries'

FROM

hr. employees;

1. Write a query to get the maximum and minimum salary from employees table...?

SELECT

MAX(salary) AS 'Maximum Salary',

MIN(salary) AS 'Minimum Salary'

FROM

hr. employees;

1. Write a query to get the average salary and number of employees in the employees table...?

SELECT

AVG(salary) AS 'Average Salary',

COUNT(employee\_id) AS 'Count of Employees'

FROM

hr. employees;

1. Write a query to get the number of employees working with the company...?

SELECT

COUNT(employee\_id) AS 'number of employees working with the company'

FROM

hr. employees;

1. Write a query to get the number of jobs available in the employees table...?

SELECT

COUNT(DISTINCT job\_id) AS 'number\_of\_jobs'

FROM

hr. employees;

1. Write a query get all first name from employees table in upper case...?

SELECT

UPPER(first\_name) AS 'First\_name in Upper case'

FROM

hr. employees;

1. Write a query to get the first 3 characters of first name from employees table...?

SELECT

SUBSTR(first\_name, 1, 3) AS 'First 3 Char of name'

FROM

hr. employees;

1. Write a query to get first name from employees table after removing white spaces from both side...?

SELECT

RTRIM(LTRIM(first\_name)) AS 'name without spaces'

FROM

hr. employees

1. Write a query to get the length of the employee names (first\_name, last\_name) from employees table...?

SELECT

LENGTH (first\_name) AS length\_first\_name,

LENGTH (last\_name) AS length\_last\_name

FROM

hr. employees;

1. Write a query to check if the first\_name fields of the employees table contains numbers...?

SELECT

first\_name AS employees\_table\_contains\_numbers

FROM

hr. employees

WHERE

first\_name REGEXP '[0-9]';

1. Write a query to display the name (first\_name, last\_name) and salary for all employees whose salary is not in the range $10,000 through $15,000...?

SELECT

first\_name, last\_name, salary

FROM

hr. employees

WHERE

salary NOT BETWEEN 10000 AND 15000;

1. Write a query to display the name (first\_name, last\_name) and department ID of all employees in departments 30 or 100 in ascending order...?

SELECT

first\_name, last\_name, department\_id

FROM

hr. employees

WHERE

department\_id IN (30, 100)

ORDER BY department\_id ASC;

1. Write a query to display the name (first\_name, last\_name) and salary for all employees whose salary is not in the range $10,000 through $15,000 and are in department 30 or 100...?

SELECT

first\_name, last\_name, salary

FROM

hr. employees

WHERE

salary NOT BETWEEN 10000 AND 15000

AND department\_id IN (30, 100);

1. Write a query to display the name (first\_name, last\_name) and hire date for all employees who were hired in 1987...?

SELECT

\*

FROM

hr. employees

WHERE

YEAR (hire\_date) = '1987%';

1. Write a query to display the first\_name of all employees who have both "b" and "c" in their first name...?

SELECT

first\_name AS 'first\_name with b and c'

FROM

hr. employees

WHERE

first\_name LIKE '%b%'

AND first\_name LIKE '%c%';

1. Write a query to display the last name, job, and salary for all employees whose job is that of a Programmer or a Shipping Clerk, and whose salary is not equal to $4,500, $10,000, or $15,000...?

SELECT

last\_name, job\_id, salary

FROM

hr. employees

WHERE

job\_id IN ('SH\_Clerk' , 'IT\_PROG')

AND salary NOT IN (4500, 10000, 15000);

1. Write a query to display the last name of employees whose names have exactly 6 characters...?

SELECT

last\_name

FROM

hr.employees

WHERE

LENGTH (last\_name) = 6;

1. Write a query to display the last name of employees having 'e' as the third character...?

SELECT last\_name

FROM

hr. employees

WHERE

last\_name LIKE '\_\_e%';

1. Write a query to get the job\_id and related employee's id Partial output of the query …?

SELECT

job\_id, GROUP\_CONCAT (employee\_id, ' ') 'Employee ID'

FROM

hr. employees

GROUP BY job\_id;

1. Write a query to update the portion of the phone\_number in the employees table, within the phone number the substring '124' will be replaced by'999 ("for this you have to toggle off the SQL Editor --> safe Updates")

UPDATE hr. employees

SET

phone\_number = REPLACE (phone\_number, '124', '999')

WHERE

phone\_number LIKE '%124%';

1. Write a query to get the details of the employees where the length of the first name greater than or equal to 8

SELECT \* FROM

hr. employees

WHERE

LENGTH (first\_name) >= 8;

1. Write a query to append '@example.com' to email field

UPDATE hr. employees

SET

email = CONCAT (email, '@example.com');

SELECT

email

FROM

hr. employees;

1. Write a query to extract the last 4 character of phone numbers

SELECT

\*, SUBSTR (phone\_number, - 4)

FROM

hr. employees;

1. Write a query to get the last word of the street address

SELECT

SUBSTRING\_INDEX (street\_address, ' ', - 1) AS 'last\_words in Street\_address'

FROM

hr. locations;

1. Write a query to get the locations that have minimum street length

SELECT

\*

FROM

hr. locations

WHERE

LENGTH (street\_address) <= (SELECT

MIN (LENGTH (street\_address))

FROM

hr. locations);

1. Write a query to display the first word from those job titles which contains more than one words

SELECT

SUBSTRING\_INDEX (job\_title, ' ', 1) AS 'first\_word in Street\_address'

FROM

hr.jobs;

1. Write a query to display the length of first name for employees where last name contain character 'c' after 2nd position

SELECT

first\_name,

last\_name,

LENGTH (first\_name) AS 'length of first name'

FROM

hr. employees

WHERE

INSTR (last\_name, 'c') > 2;

1. Write a query that displays the first name and the length of the first name for all employees whose name starts with the letters 'A', 'J' or 'M'. Give each column an appropriate label. Sort the results by the employees' first names

SELECT

first\_name 'Name',

LENGTH (first\_name) 'length'

FROM

hr. employees

WHERE

first\_name LIKE 'A%'

OR first\_name LIKE 'J%'

OR first\_name LIKE 'M%'

GROUP BY first\_name

ORDER BY first\_name;

1. Write a query to display the first name and salary for all employees. Format the salary to be 10 characters long, left-padded with the $ symbol. Label the column SALARY

SELECT

first\_name, salary, LPAD (salary, 10, '$') 'salary in $'

FROM

hr. employees;

1. Write a query to display the first eight characters of the employees' first names and indicates the amounts of their salaries with '$' sign. Each '$' sign signifies a thousand dollars. Sort the data in descending order of salary

SELECT

LEFT (first\_name, 8) AS 'Name',

REPEAT ('$', FLOOR (salary / 1000)) '$ for thousands ‘,

salary

FROM

hr. employees

ORDER BY salary DESC;

1. Write a query to display the employees with their code, first name, last name and hire date who hired either on seventh day of any month or seventh month in any year

SELECT

employee\_id, first\_name, last\_name, hire\_date

FROM hr. employees

WHERE POSITION ('07' IN DATE\_FORMAT (hire\_date, '%d %m %y')) > 0

# **NORTHWIND DATABASE EXERCISE**

1.Write a query to get Product name and quantity/unit

SELECT

productName, QuantityPerUnit

FROM

northwind.products;

2. Write a query to get current Product list (Product ID and name)

SELECT

ProductID, ProductName

FROM

northwind.products

WHERE

Discontinued = '0'

ORDER BY productName;

3. Write a query to get discontinued Product list (Product ID and name)

SELECT

ProductID, ProductName

FROM

northwind.products

WHERE

Discontinued = '1'

ORDER BY productName;

4.Write a query to get most expense and least expensive Product list (name and unit price)

SELECT

ProductName, UnitPrice

FROM

northwind.products

ORDER BY UnitPrice DESC;

1. Write a query to get Product list (id, name, unit price) where current products cost less than $20

SELECT

productID, ProductName, UnitPrice

FROM

northwind.products

WHERE

Discontinued = '0' AND UnitPrice < 20

ORDER BY ProductName;

1. Write a query to get Product list (id, name, unit price) where products cost between $15 and $25

SELECT

productID, ProductName, UnitPrice

FROM

northwind.products

WHERE

UnitPrice BETWEEN 15 AND 25

ORDER BY ProductName;

1. Write a query to get Product list (name, unit price) of above average price

SELECT

ProductName, UnitPrice

FROM

northwind.products

WHERE

UnitPrice > (SELECT

AVG(Unitprice)

FROM

northwind.products)

ORDER BY unitprice;

1. Write a query to get Product list (name, unit price) of ten most expensive products

SELECT

productName, UnitPrice

FROM

northwind.products

ORDER BY UnitPrice DESC

LIMIT 10;

1. Write a query to count current and discontinued products

SELECT

COUNT(ProductName)

FROM

northwind.products

GROUP BY Discontinued;

1. Write a query to get Product list (name, units on order , units in stock) of stock is less than the quantity on order

SELECT

ProductName, UnitsOnOrder, UnitsInStock

FROM

northwind.products

WHERE

(((discontinued) = 'false')

AND ((UnitsInStock) < UnitsOnOrder));