1. Write a query to find the name (first\_name, last\_name) and the salary of the employees who have a higher salary than the employee whose last\_name='Bull'.

SELECT FIRST\_NAME, LAST\_NAME, SALARY

FROM employees

WHERE SALARY >

(SELECT salary FROM employees WHERE last\_name = 'Bull');

1. Write a query to find the name (first\_name, last\_name) of all employees who works in the IT department.

SELECT first\_name, last\_name

FROM employees

WHERE department\_id

IN (SELECT department\_id FROM departments WHERE department\_name='IT');

1. Write a query to find the name (first\_name, last\_name) of the employees who have a manager and worked in a USA based department.

Please refer employees and department table and locations

Department table

DEPARTMENT\_ID | DEPARTMENT\_NAME | MANAGER\_ID | LOCATION\_ID |

+---------------+----------------------+------------+-------------+

| 10 | Administration | 200 | 1700 |

| 20 | Marketing | 201 | 1800 |

| 30 | Purchasing | 114 | 1700 |

| 40 | Human Resources | 203 | 2400 |

| 50 | Shipping | 121 | 1500 |

| 60 | IT | 103 | 1400 |

| 70 | Public Relations | 204 | 2700 |

| 80 | Sales | 145 | 2500 |

| 90 | Executive | 100 | 1700 |

| 100 | Finance | 108 | 1700 |

| 110 | Accounting | 205 | 1700 |

| 120 | Treasury | 0 | 1700 |

| 130 | Corporate Tax | 0 | 1700 |

| 140 | Control And Credit | 0 | 1700 |

| 150 | Shareholder Services | 0 | 1700 |

| 160 | Benefits | 0 | 1700 |

| 170 | Manufacturing | 0 | 1700 |

| 180 | Construction | 0 | 1700 |

| 190 | Contracting | 0 | 1700 |

| 200 | Operations | 0 | 1700 |

| 210 | IT Support | 0 | 1700 |

| 220 | NOC | 0 | 1700 |

| 230 | IT Helpdesk | 0 | 1700 |

| 240 | Government Sales | 0 | 1700 |

| 250 | Retail Sales | 0 | 1700 |

| 260 | Recruiting | 0 | 1700 |

| 270 | Payroll | 0 | 1700 |

+---------------+----------------------+------------+-------------+

Table locations

location\_id street\_address postal\_code city state\_province country\_id

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1000 1297 Via Cola di Rie 989 Roma IT

1100 93091 Calle della Te 10934 Venice IT

1200 2017 Shinjuku-ku 1689 Tokyo Tokyo Prefectu JP

1300 9450 Kamiya-cho 6823 Hiroshima JP

1400 2014 Jabberwocky Rd 26192 Southlake Texas US

1500 2011 Interiors Blvd 99236 South San California US

1600 2007 Zagora St 50090 South Brun New Jersey US

1700 2004 Charade Rd 98199 Seattle Washington US

1800 147 Spadina Ave M5V 2L7 Toronto Ontario CA

1900 6092 Boxwood St YSW 9T2 Whitehorse Yukon CA

2000 40-5-12 Laogianggen 190518 Beijing CN

2100 1298 Vileparle (E) 490231 Bombay Maharashtra IN

2200 12-98 Victoria Stree 2901 Sydney New South Wale AU

2300 198 Clementi North 540198 Singapore SG

2400 8204 Arthur St London UK

2500 Magdalen Centre, The OX9 9ZB Oxford Oxford UK

2600 9702 Chester Road 9629850293 Stretford Manchester UK

2700 Schwanthalerstr. 703 80925 Munich Bavaria DE

2800 Rua Frei Caneca 1360 01307-002 Sao Paulo Sao Paulo BR

2900 20 Rue des Corps-Sai 1730 Geneva Geneve CH

3000 Murtenstrasse 921 3095 Bern BE CH

3100 Pieter Breughelstraa 3029SK Utrecht Utrecht NL

3200 Mariano Escobedo 999 11932 Mexico Cit Distrito Feder MX

SELECT first\_name, last\_name FROM employees

WHERE manager\_id in (select employee\_id

FROM employees WHERE department\_id

IN (SELECT department\_id FROM departments WHERE location\_id

IN (select location\_id from locations where country\_id='US')));

1. Write a query to find the name (first\_name, last\_name) of the employees who are managers

SELECT first\_name, last\_name

FROM employees

WHERE (employee\_id IN (SELECT manager\_id FROM employees));

1. Write a query to find the name (first\_name, last\_name), and salary of the employees whose salary is greater than the average salary.

SELECT first\_name, last\_name, salary FROM employees

WHERE salary > (SELECT AVG(salary) FROM employees);

1. Write a query to find the name (first\_name, last\_name), and salary of the employees whose salary is equal to the minimum salary for their job grade.

Refer employees and jobs table

SELECT first\_name, last\_name, salary

FROM employees

WHERE employees.salary = (SELECT min\_salary

FROM jobs

WHERE employees.job\_id = jobs.job\_id);

1. Write a query to find the name (first\_name, last\_name), and salary of the employees who earns more than the average salary and works in any of the IT departments.

Refer employees and departments

SELECT first\_name, last\_name, salary

FROM employees

WHERE department\_id IN

(SELECT department\_id FROM departments WHERE department\_name LIKE 'IT%')

AND salary > (SELECT avg(salary) FROM employees);

1. Write a query to find the name (first\_name, last\_name), and salary of the employees who earns more than the earning of Mr. Bell.

SELECT first\_name, last\_name, salary

FROM employees

WHERE salary >

(SELECT salary FROM employees WHERE last\_name = 'Bell') ORDER BY first\_name;

1. Write a query to find the name (first\_name, last\_name), and salary of the employees who earn the same salary as the minimum salary for all departments.

SELECT \* FROM employees

WHERE salary = (SELECT MIN(salary) FROM employees);

1. Write a query to find the name (first\_name, last\_name), and salary of the employees whose salary is greater than the average salary of all departments.

SELECT \* FROM employees

WHERE salary >

ALL(SELECT avg(salary)FROM employees GROUP BY department\_id);

1. Write a query to find the name (first\_name, last\_name) and salary of the employees who earn a salary that is higher than the salary of all the Shipping Clerk (JOB\_ID = 'SH\_CLERK'). Sort the results of the salary of the lowest to highest.

SELECT first\_name,last\_name, job\_id, salary

FROM employees

WHERE salary >

ALL (SELECT salary FROM employees WHERE job\_id = 'SH\_CLERK') ORDER BY salary;

1. Write a query to find the name (first\_name, last\_name) of the employees who are not supervisors

SELECT b.first\_name,b.last\_name

FROM employees b

WHERE NOT EXISTS (SELECT 'X' FROM employees a WHERE a.manager\_id = b.employee\_id);

1. Write a query to display the employee ID, first name, last name, and department names of all employees.

SELECT employee\_id, first\_name, last\_name,

(SELECT department\_name FROM departments d

WHERE e.department\_id = d.department\_id) department

FROM employees e ORDER BY department;

1. Write a query to display the employee ID, first name, last name, salary of all employees whose salary is above average for their departments

SELECT employee\_id, first\_name

FROM employees AS A

WHERE salary >

(SELECT AVG(salary) FROM employees WHERE department\_id = A.department\_id);

1. Write a query to fetch even numbered records from employees table.

SET @i = 0;

SELECT i, employee\_id

FROM (SELECT @i := @i + 1 AS i, employee\_id FROM employees)

a WHERE MOD(a.i, 2) = 0;

1. Write a query to find the 5th maximum salary in the employees table

SELECT DISTINCT salary

FROM employees e1

WHERE 5 = (SELECT COUNT(DISTINCT salary)

FROM employees e2

WHERE e2.salary >= e1.salary);

1. Write a query to find the 4th minimum salary in the employees table

SELECT DISTINCT salary

FROM employees e1

WHERE 4 = (SELECT COUNT(DISTINCT salary)

FROM employees e2

WHERE e2.salary <= e1.salary);

1. Write a query to select last 10 records from a table

SELECT \* FROM (

SELECT \* FROM employees ORDER BY employee\_id

DESC LIMIT 10) sub

ORDER BY employee\_id ASC;

1. Write a query to list the department ID and name of all the departments where no employee is working.

SELECT \* FROM departments

WHERE department\_id

NOT IN (select department\_id FROM employees);

1. Write a query to get 3 maximum salaries?

SELECT DISTINCT salary //For the max and min same

FROM employees a

WHERE 3 >= (SELECT COUNT(DISTINCT salary)

FROM employees b

WHERE b.salary >= a.salary)

ORDER BY a.salary DESC

1. Write a query to get 3 minimum salaries.

SELECT DISTINCT salary //for max and Min also the same

FROM employees a

WHERE 3 >= (SELECT COUNT(DISTINCT salary)

FROM employees b

WHERE b.salary >= a.salary)

ORDER BY a.salary DESC

1. Write a query to get nth max salaries of employees

SELECT \*

FROM employees emp1

WHERE (1) = (

SELECT COUNT(DISTINCT(emp2.salary))

FROM employees emp2

WHERE emp2.salary > emp1.salary);