/\* CREATE DATABASE ORG123;

SHOW DATABASES;

USE ORG123;

CREATE TABLE Worker (

WORKER\_ID INT NOT NULL PRIMARY KEY AUTO\_INCREMENT,

FIRST\_NAME CHAR(25),

LAST\_NAME CHAR(25),

SALARY INT(15),

JOINING\_DATE DATETIME,

DEPARTMENT CHAR(25)

);

INSERT INTO Worker

(WORKER\_ID, FIRST\_NAME, LAST\_NAME, SALARY, JOINING\_DATE, DEPARTMENT) VALUES

(001, 'Monika', 'Arora', 100000, '14-02-20 09.00.00', 'HR'),

(002, 'Niharika', 'Verma', 80000, '14-06-11 09.00.00', 'Admin'),

(003, 'Vishal', 'Singhal', 300000, '14-02-20 09.00.00', 'HR'),

(004, 'Amitabh', 'Singh', 500000, '14-02-20 09.00.00', 'Admin'),

(005, 'Vivek', 'Bhati', 500000, '14-06-11 09.00.00', 'Admin'),

(006, 'Vipul', 'Diwan', 200000, '14-06-11 09.00.00', 'Account'),

(007, 'Satish', 'Kumar', 75000, '14-01-20 09.00.00', 'Account'),

(008, 'Geetika', 'Chauhan', 90000, '14-04-11 09.00.00', 'Admin');

CREATE TABLE Bonus (

WORKER\_REF\_ID INT,

BONUS\_AMOUNT INT(10),

BONUS\_DATE DATETIME,

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

ON DELETE CASCADE

);

INSERT INTO Bonus

(WORKER\_REF\_ID, BONUS\_AMOUNT, BONUS\_DATE) VALUES

(001, 5000, '16-02-20'),

(002, 3000, '16-06-11'),

(003, 4000, '16-02-20'),

(001, 4500, '16-02-20'),

(002, 3500, '16-06-11');

CREATE TABLE Title (

WORKER\_REF\_ID INT,

WORKER\_TITLE CHAR(25),

AFFECTED\_from DATETIME,

FOREIGN KEY (WORKER\_REF\_ID)

REFERENCES Worker(WORKER\_ID)

ON DELETE CASCADE

);

INSERT INTO Title

(WORKER\_REF\_ID, WORKER\_TITLE, AFFECTED\_from) VALUES

(001, 'Manager', '2016-02-20 00:00:00'),

(002, 'Executive', '2016-06-11 00:00:00'),

(008, 'Executive', '2016-06-11 00:00:00'),

(005, 'Manager', '2016-06-11 00:00:00'),

(004, 'Asst. Manager', '2016-06-11 00:00:00'),

(007, 'Executive', '2016-06-11 00:00:00'),

(006, 'Lead', '2016-06-11 00:00:00'),

(003, 'Lead', '2016-06-11 00:00:00'); \*/

select \* from Worker

select \* from Bonus

select \* from Title

-- 1

select distinct DEPARTMENT from Worker;

-- 2

select \* from Worker order by FIRST\_NAME ASC, DEPARTMENT DESC;

-- 3

select \* from Worker where FIRST\_NAME like '%a%';

-- 4

select \* from Worker where FIRST\_NAME LIKE '\_\_\_\_\_h';

-- 5

select \* from Worker where SALARY BETWEEN 100000 AND 500000;

-- 6

select \* from Worker where JOINING\_DATE >= '2014-02-01' AND JOINING\_DATE < '2014-03-01';

-- 7

select COUNT(\*) AS Admin\_Count from Worker where DEPARTMENT = 'Admin';

-- 8

select FIRST\_NAME, LAST\_NAME, SALARY from Worker where SALARY between 50000 and 100000;

-- 9

select DEPARTMENT, COUNT(\*) as Worker\_Count from Worker group by DEPARTMENT

order by Worker\_Count DESC;

-- 10

select w.\* from Worker w

join Title t on w.WORKER\_ID = t.WORKER\_REF\_ID

where t.WORKER\_TITLE = 'Manager';

-- 11

select MIN(SALARY) as Second\_Lowest\_Salary

from Worker

where SALARY > (

select MIN(SALARY)

from Worker

);

-- 12

select \*

from Worker

where SALARY IN (

select SALARY

from Worker

GROUP BY SALARY

HAVING COUNT(\*) > 1

);

-- 13

select MAX(SALARY) AS Second\_Highest\_Salary

from Worker

where SALARY < (

select MAX(SALARY)

from Worker

);

-- 14

select \* from Worker

where WORKER\_ID = 1

union all

select \* from Worker

where WORKER\_ID = 1;

-- 15

select \*

from Worker

ORDER BY WORKER\_ID

LIMIT 4;

-- 16

select DEPARTMENT

from Worker

GROUP BY DEPARTMENT

HAVING COUNT(\*) < 3;

-- 17

select DEPARTMENT, COUNT(\*) as Number\_of\_Workers

from Worker

GROUP BY DEPARTMENT;

-- 18

select \*

from Worker

ORDER BY WORKER\_ID DESC

LIMIT 5;

-- 19

select w.FIRST\_NAME, w.LAST\_NAME, w.DEPARTMENT, w.SALARY

from Worker w

JOIN (

select DEPARTMENT, MAX(SALARY) AS Max\_Salary

from Worker

GROUP BY DEPARTMENT

) AS dept\_max ON w.DEPARTMENT = dept\_max.DEPARTMENT AND w.SALARY = dept\_max.Max\_Salary;

-- 20

select SALARY

from Worker w1

where (

select COUNT(DISTINCT SALARY)

from Worker w2

where w2.SALARY > w1.SALARY

) < 3

ORDER BY SALARY DESC;

-- 21

select FIRST\_NAME, LAST\_NAME, SALARY, DEPARTMENT

from Worker

where (DEPARTMENT = 'Account' AND SALARY = (

select MIN(SALARY)

from Worker

where DEPARTMENT = 'Account'

))

OR (DEPARTMENT = 'Admin' AND SALARY = (

select MIN(SALARY)

from Worker

where DEPARTMENT = 'Admin'

));