```
mysql> show databases;
create table Workers
(
  Workers_ID int NOT NULL PRIMARY KEY AUTO_INCREMENT,
  FIRST_NAME varchar(25),
  LAST_NAME varchar(25),
  Salary int(15),
  Joining_date datetime,
  Department varchar(25)
);
insert into
Workers(Workers_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');

select * from Workers;

Queries to be executed:
1.mysql> select FIRST_NAME as WORKERS_NAME from Workers;
+--------------+
| WORKERS_NAME |
+--------------+
| Monika       |
| Niharika     |
| Vishal       |
| Amitabh      |
| Vivek        |
| Vipul        |
| Satish       |
| Geetika      |
+--------------+
------------------------------------------------------------------------
2.mysql> select UPPER(FIRST_NAME) from Workers;
+-------------------+
| UPPER(FIRST_NAME) |
+-------------------+
| MONIKA            |
| NIHARIKA          |
| VISHAL            |
| AMITABH           |
| VIVEK             |
| VIPUL             |
| SATISH            |
| GEETIKA           |
+-------------------+
------------------------------------------------------------------------
3.mysql> select distinct Department from Workers;
+------------+
| Department |
+------------+
```

```
| HR         |
| Admin      |
| Account    |
+------------+
--------------------------------------------------------------------------
4.mysql> select SUBSTR(FIRST_NAME,1,3) from Workers;
+------------------------+
| SUBSTR(FIRST_NAME,1,3) |
+------------------------+
| Mon                    |
| Nih                    |
| Vis                    |
| Ami                    |
| Viv                    |
| Vip                    |
| Sat                    |
| Gee                    |
+------------------------+
------------------------------------------------------------------------------
-------
5.mysql> select INSTR(FIRST_NAME,BINARY'a') from Workers where
FIRST_NAME='Amitabh';
+-----------------------------+
| INSTR(FIRST_NAME,BINARY'a') |
+-----------------------------+
|                           1 |
+-----------------------------+
------------------------------------------------------------------------------
--------
6.mysql> select TRIM(FIRST_NAME) from Workers;
+------------------+
| TRIM(FIRST_NAME) |
+------------------+
| Monika           |
| Niharika         |
| Vishal           |
| Amitabh          |
| Vivek            |
| Vipul            |
| Satish           |
| Geetika          |
+------------------+
---------------------------------------------
7.mysql> select Department from Workers;
+------------+
| Department |
+------------+
| HR         |
| Admin      |
| HR         |
| Admin      |
| Admin      |
| Account    |
| Account    |
| Admin      |
+------------+
```

```
------------------------------------------------------------
8.mysql> select distinct(length(Department)) from Workers;
+----------------------+
| (length(Department)) |
+----------------------+
|                    2 |
|                    5 |
|                    7 |
+----------------------+
------------------------------------------------------------
9.mysql> select replace(FIRST_NAME,'a','A') from Workers;
+-----------------------------+
| replace(FIRST_NAME,'a','A') |
+-----------------------------+
| MonikA                      |
| NihArikA                    |
| VishAl                      |
| AmitAbh                     |
| Vivek                       |
| Vipul                       |
| SAtish                      |
| GeetikA                     |
+-----------------------------+
------------------------------------------------------------------------------
-----
10.mysql> select concat(FIRST_NAME,' ',LAST_NAME) as COMPLETE_NAME from Workers;
+-----------------+
| COMPLETE_NAME   |
+-----------------+
| Monika Arora    |
| Niharika Verma  |
| Vishal Singhal  |
| Amitabh Singh   |
| Vivek Bhati     |
| Vipul Diwan     |
| Satish Kumar    |
| Geetika Chauhan |
+-----------------+
------------------------------------------------------------------------------
---------
11.mysql> select * from Workers Order by FIRST_NAME ASC;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
```

```
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
-------------------------------------------------------------------------------
-----------
12.mysql> select * from Workers Order by FIRST_NAME ASC,Department DESC;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
-------------------------------------------------------------------------------
----------------
13.mysql> select * from Workers where TRIM(FIRST_NAME)='Vipul' OR
TRIM(FIRST_NAME)='Satish';
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
+------------+------------+-----------+--------+---------------------+----------
--+
-------------------------------------------------------------------------------
------------
14.mysql> select * from Workers where FIRST_NAME NOT IN('Vipul','Satish');
+------------+------------+-----------+--------+---------------------+----------
```

```
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
-------
15.mysql> select * from Workers where Department like 'Admin%';
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
-------
16.mysql> select * from Workers where FIRST_NAME like '%a%';
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
```

```
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
------
17.mysql> select * from Workers where FIRST_NAME like '%a';
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
---------
18.mysql> select * from Workers where FIRST_NAME like '___h';
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
---------
19.mysql> select * from Workers where salary>=100000 and salary<=500000;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
+------------+------------+-----------+--------+---------------------+----------
--+
```

```
--------------------------------------------------------------------------------
----------
20.mysql> select * from Workers where year(Joining_date)=2014 and
month(Joining_date)=2;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
----------
21.mysql> select count(*) from Workers where Department='Admin';
+----------+
| count(*) |
+----------+
|        4 |
+----------+
--------------------------------------------------------------------------------
-----------
22.mysql> select concat(FIRST_NAME, ' ', LAST_NAME) as WORKERS_NAME,salary
from Workers
where WORKERS_ID in (select WORKERS_ID from Workers
where salary>=50000 and salary<=100000);
+-----------------+--------+
| WORKERS_NAME    | salary |
+-----------------+--------+
| Monika Arora    | 100000 |
| Niharika Verma  |  80000 |
| Satish Kumar    |  75000 |
| Geetika Chauhan |  90000 |
+-----------------+--------+
--------------------------------------------------------------------------------
-----------
23.mysql> select Department,count(WORKERS_ID) Number_of_Workers
from Workers
group by Department
order by Number_Of_Workers DESC;
+------------+-------------------+
| Department | Number_of_Workers |
+------------+-------------------+
| Admin      |                 4 |
| HR         |                 2 |
| Account    |                 2 |
+------------+-------------------+
--------------------------------------------------------------------------------
-------
create table Title
```

```
(
 Worker_Ref_ID int,
 Worker_Title char(25),
 Affected_from datetime,
 FOREIGN KEY(Worker_Ref_ID)
REFERENCES Workers(Workers_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');
--------------------------------------------------------------------------------
------
24.mysql> select distinct W.FIRST_NAME, T.Worker_Title
    -> from Workers W
    -> INNER JOIN Title T
    -> on W.Workers_ID = T.Worker_Ref_ID
    -> and T.Worker_Title in ('Manager');
+------------+--------------+
| FIRST_NAME | Worker_Title |
+------------+--------------+
| Monika     | Manager      |
| Vivek      | Manager      |
+------------+--------------+
----------------------------------------------------------------------
25.mysql> select Worker_Title, Affected_from, count(*)
    -> from Title
    -> group by Worker_Title, Affected_from
    -> having count(*) > 1;
+--------------+---------------------+----------+
| Worker_Title | Affected_from       | count(*) |
+--------------+---------------------+----------+
| Executive    | 2016-06-11 00:00:00 |        3 |
| Lead         | 2016-06-11 00:00:00 |        2 |
+--------------+---------------------+----------+
--------------------------------------------------------------------------------
---------
26.mysql> select * from Workers where MOD (Workers_ID,2) <> 0;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
```

```
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
+------------+------------+-----------+--------+---------------------+----------
--+

  mysql> select * from Title where MOD (Worker_Ref_ID,2) <> 0;
+---------------+-------------+---------------------+
| Worker_Ref_ID | Worker_Title | Affected_from       |
+---------------+-------------+---------------------+
|             1 | Manager      | 2016-02-20 00:00:00 |
|             5 | Manager      | 2016-06-11 00:00:00 |
|             7 | Executive    | 2016-06-11 00:00:00 |
|             3 | Lead         | 2016-06-11 00:00:00 |
+---------------+-------------+---------------------+
--------------------------------------------------------------------------------
-----------
27.mysql> select * from Workers where MOD (Workers_ID,2)=0;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+

  mysql> select * from Title where MOD (Worker_Ref_ID,2)=0;
+---------------+--------------+---------------------+
| Worker_Ref_ID | Worker_Title  | Affected_from       |
+---------------+--------------+---------------------+
|             2 | Executive     | 2016-06-11 00:00:00 |
|             8 | Executive     | 2016-06-11 00:00:00 |
|             4 | Asst. Manager | 2016-06-11 00:00:00 |
|             6 | Lead          | 2016-06-11 00:00:00 |
+---------------+--------------+---------------------+
--------------------------------------------------------------------------------
------------------------------
28.mysql> create table WorkersClone as select * from Workers;
Query OK, 8 rows affected (0.24 sec)
mysql> insert into
WorkersClone(Workers_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');
Query OK, 8 rows affected (0.24 sec)
Records: 8  Duplicates: 0  Warnings: 0

mysql> select * from WorkersClone;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
---------------------------------
29.mysql> create table Bonus (
    ->  Workers_Ref_ID int,
    ->  Bonus_Amount int(10),
    ->  Bonus_Date datetime,
    ->  FOREIGN KEY (Workers_Ref_ID)
    ->  REFERENCES Workers(Workers_ID)
    ->  ON DELETE CASCADE
    -> );
Query OK, 0 rows affected, 1 warning (2.13 sec)

mysql> insert into Bonus
    ->  (Workers_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');
Query OK, 5 rows affected (0.17 sec)
Records: 5  Duplicates: 0  Warnings: 0

mysql> select * from Bonus;
```

```
+---------------+-------------+---------------------+
| Workers_Ref_ID | Bonus_Amount | Bonus_Date          |
+---------------+-------------+---------------------+
|              1 |         5000 | 2016-02-20 00:00:00 |
|              2 |         3000 | 2016-06-11 00:00:00 |
|              3 |         4000 | 2016-02-20 00:00:00 |
|              1 |         4500 | 2016-02-20 00:00:00 |
|              2 |         3500 | 2016-06-11 00:00:00 |
+---------------+-------------+---------------------+
5 rows in set (0.00 sec)
mysql> select *
    -> from Workers
    -> where Workers_ID in(
    -> select Workers_Ref_ID
    -> from Bonus);
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
---------------------------
30.mysql> select *
    -> from Workers where
    -> Workers_ID not in
    -> ( select Workers_Ref_ID
    -> from Bonus);
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
---------------------------
```

```
31.mysql> select NOW();
+---------------------+
| NOW()               |
+---------------------+
| 2021-09-18 11:57:52 |
+---------------------+
------------------------------------------------------------------
32.mysql> select * from Workers order by salary DESC LIMIT 10;
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
|          5 | Vivek      | Bhati     | 500000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          6 | Vipul      | Diwan     | 200000 | 2014-06-11 09:00:00 | Account
 |
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          7 | Satish     | Kumar     |  75000 | 2014-01-20 09:00:00 | Account
 |
+------------+------------+-----------+--------+---------------------+----------
--+
------------------------------------------------------------------------------
-------------
33.mysql> select salary from Workers order by salary DESC LIMIT 4,1;
+--------+
| salary |
+--------+
| 100000 |
+--------+
------------------------------------------------------------------------
34.mysql> select salary
    -> from Workers W1
    -> where 4 = (
    ->  select count( DISTINCT ( W2.salary ) )
    ->  from Workers W2
    ->  where W2.salary >= W1.salary
    ->  );
+--------+
| salary |
+--------+
| 100000 |
+--------+
----------------------------------------------------------------------
35.mysql> select distinct W.Workers_ID, W.FIRST_NAME, W.salary
    -> from Workers W, Workers W1
```

```
    -> where W.Salary = W1.Salary
    -> and W.Workers_ID != W1.Workers_ID;
+------------+------------+--------+
| Workers_ID | FIRST_NAME | salary |
+------------+------------+--------+
|          5 | Vivek      | 500000 |
|          4 | Amitabh    | 500000 |
+------------+------------+--------+
-----------------------------------------------------------------------
36.mysql> select max(salary) from Workers
    -> where salary not in (select max(salary) from Workers);
+-------------+
| max(salary) |
+-------------+
|      300000 |
+-------------+
-------------------------------------------------------------------------------
----
37.mysql> select FIRST_NAME,Department from Workers W where W.Department='Admin'
    -> union all
    -> select FIRST_NAME,Department from Workers W2 where W2.Department='Admin';
+------------+------------+
| FIRST_NAME | Department |
+------------+------------+
| Niharika   | Admin      |
| Amitabh    | Admin      |
| Vivek      | Admin      |
| Geetika    | Admin      |
+------------+------------+
-------------------------------------------------------------------------------
-----
38.mysql> select *
    -> from Workers
    -> where Workers_ID in(
    -> select Workers_Ref_ID
    -> from Bonus);
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
+------------+------------+-----------+--------+---------------------+----------
--+
-------------------------------------------------------------------------------
-------
39.mysql> select * from Workers
    -> where Workers_ID <= (select count(Workers_ID)/2 from Workers);
+------------+------------+-----------+--------+---------------------+----------
--+
```

```
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
|          2 | Niharika   | Verma     |  80000 | 2014-06-11 09:00:00 | Admin
 |
|          3 | Vishal     | Singhal   | 300000 | 2014-02-20 09:00:00 | HR
 |
|          4 | Amitabh    | Singh     | 500000 | 2014-02-20 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
-------
40.mysql> select Department, count(Workers_ID) as 'Number of Workers'
    -> from Workers group by Department
    -> having count(Workers_ID) < 5;
+------------+-------------------+
| Department | Number of Workers |
+------------+-------------------+
| HR         |                 2 |
| Admin      |                 4 |
| Account    |                 2 |
+------------+-------------------+
--------------------------------------------------------------------------------
41.mysql> select Department, count(Department)
    -> as 'Number of Workers'
    -> from Workers group by Department;
+------------+-------------------+
| Department | Number of Workers |
+------------+-------------------+
| HR         |                 2 |
| Admin      |                 4 |
| Account    |                 2 |
+------------+-------------------+
--------------------------------------------------------------------------------
----------------
42.mysql> select * from Workers where Workers_ID = (select MAX(Workers_ID) from
Workers);
+------------+------------+-----------+--------+---------------------+----------
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          8 | Geetika    | Chauhan   |  90000 | 2014-04-11 09:00:00 | Admin
 |
+------------+------------+-----------+--------+---------------------+----------
--+
--------------------------------------------------------------------------------
----------------
43.mysql> select * from Workers where Workers_ID = (select MIN(Workers_ID) from
Workers);
+------------+------------+-----------+--------+---------------------+----------
```

```
--+
| Workers_ID | FIRST_NAME | LAST_NAME | Salary | Joining_date        |
Department |
+------------+------------+-----------+--------+---------------------+----------
--+
|          1 | Monika     | Arora     | 100000 | 2014-02-20 09:00:00 | HR
 |
+------------+------------+-----------+--------+---------------------+----------
--+
-------------------------------------------------------------------------------
------------------
```