

SQL ASSIGNMENT

Create a database worker that should contain **first name, last name email, department, salary, Join Date** with 50 employees.

```
mysql> CREATE DATABASE ORG;
ERROR 1007 (HY000): Can't create database 'org'; database exists
mysql> SHOW DATABASES;
+-----+
| Database |
+-----+
| information_schema |
| mysql |
| org |
| performance_schema |
| sakila |
| sys |
| world |
+-----+
7 rows in set (0.04 sec)

mysql> USE ORG;
Database changed
mysql> 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),
-> EMAIL CHAR(25));
```

```
MySQL 8.0 Command Line Client - Unicode
Database changed
mysql> SELECT * FROM worker;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	EMAIL
1	NIHARIKA	ARORA	20000	2013-02-25 09:00:00	HR	niharika@xyz.com
2	AYUSHI	GURNDIA	5000	2015-02-10 09:00:00	ADMIN	ayushi@xyz.com
3	PRIYANSHA	CHOUKSEY	25000	2014-05-16 09:00:00	HR	priyansha@xyz.com
4	APARNA	DESHPANDE	8000	2016-12-20 09:00:00	ADMIN	aparna@xyz.com
5	SHAFALI	JAIN	21000	2015-08-29 09:00:00	ADMIN	shafali@xyz.com
6	MONI	KHATANIAI	10000	2017-08-29 09:00:00	ADMIN	moni@xyz.com
7	MOHAN	KALITA	25000	2017-08-29 09:00:00	ACCOUNTANT	mohan@xyz.com
8	KRISHNA	GOGOI	22000	2017-08-29 09:00:00	ACCOUNTANT	krishna@xyz.com
9	LUTUKON	BORIA	23000	2017-08-29 09:00:00	HR	lutukon@xyz.com
10	KASTURI	SARMAH	28000	2017-08-29 09:00:00	HR	kasturi@xyz.com
11	TONMOY	KHANAL	25000	2015-02-10 09:00:00	ADMIN	tonmoy@xyz.com
12	NIRANJAN	SARMAH	30000	2015-02-10 09:00:00	ADMIN	niranjan@xyz.com
13	AAYUSHI	CHAUHAN	20000	2015-02-10 09:00:00	ADMIN	aayushi@xyz.com
14	RAKESH	ROUT	21000	2015-02-10 09:00:00	ADMIN	rakesh@xyz.com
15	MEGHA	KHANAL	25000	2015-02-10 09:00:00	ADMIN	megha@xyz.com
16	KUNAL	KUMBANG	17000	2015-02-10 09:00:00	ADMIN	kunal@xyz.com
17	ALBERT	PINTO	18000	2015-02-10 09:00:00	ADMIN	albert@xyz.com
18	MAHESH	BABU	25000	2015-02-10 09:00:00	ADMIN	mahesh@xyz.com
19	MITTUNJOY	DAS	20000	2015-02-10 09:00:00	ADMIN	mittunjoy@xyz.com
20	JAGAT	DAS	20000	2015-02-10 09:00:00	ADMIN	jagat@xyz.com
21	RAHUL	JAIN	21000	2015-08-29 09:00:00	ACCOUNTANT	rahu@xyz.com
22	SANJOY	RAO	22000	2015-08-29 09:00:00	ACCOUNTANT	sanjoy@xyz.com
23	BIBEK	BOSE	17000	2015-08-29 09:00:00	ACCOUNTANT	bibek@xyz.com
24	JAY	DEVNATH	25000	2015-08-29 09:00:00	ACCOUNTANT	jay@xyz.com
25	BISHAL	SEN	25000	2015-08-29 09:00:00	ACCOUNTANT	bishal@xyz.com
26	PRADYUMN	SHARMA	17000	2015-08-29 09:00:00	ACCOUNTANT	pradyumn@xyz.com
27	ANJAN	MAZUMDER	17000	2015-08-29 09:00:00	ACCOUNTANT	anjan@xyz.com
28	DEEPAK	DEBNATH	18000	2015-08-29 09:00:00	ACCOUNTANT	deepak@xyz.com
29	BISHWAJIT	DEBNATH	19000	2015-08-29 09:00:00	ACCOUNTANT	bishwajit@xyz.com
30	ARPAN	DEB	19000	2015-08-29 09:00:00	ACCOUNTANT	arpan@xyz.com
31	CHANDRA	UPADHYAY	25000	2015-02-10 09:00:00	HR	chandra@xyz.com
32	SANTOSH	KHANAL	26000	2015-02-10 09:00:00	HR	santosh@xyz.com
33	GANESH	KHANAL	25000	2015-02-10 09:00:00	HR	ganesh@xyz.com
34	GITA	UPADHYAY	20000	2015-02-10 09:00:00	HR	gita@xyz.com
35	DEVI	KHANAL	20000	2015-02-10 09:00:00	HR	devi@xyz.com
36	KRANTI	KHANAL	25000	2015-02-10 09:00:00	HR	kranti@xyz.com
37	BIPLOV	KHANAL	25000	2015-02-10 09:00:00	HR	biplov@xyz.com
38	HEMO	UPADHYAY	25000	2015-02-10 09:00:00	HR	hemu@xyz.com
39	MADHAV	SARMAH	20000	2015-02-10 09:00:00	HR	madhav@xyz.com
40	RAHUL	SARMAH	22000	2015-02-10 09:00:00	HR	rahu@xyz.com
41	SAJAL	SARMAH	22000	2015-02-10 09:00:00	HR	sajal@xyz.com
42	DEEPAK	SARMAH	25000	2015-02-10 09:00:00	HR	deepak@xyz.com
43	DIPANKAR	SARMAH	25000	2015-02-10 09:00:00	HR	dipankar@xyz.com
44	JAGAT	CHETRY	25000	2015-02-10 09:00:00	ACCOUNTANT	jagat@xyz.com
45	VISHAL	PAUL	21000	2015-02-10 09:00:00	ACCOUNTANT	vishal@xyz.com
46	RAHUL	PARMANIK	20000	2015-02-10 09:00:00	ACCOUNTANT	rahu@xyz.com
47	VISHNU	DAS	27000	2015-02-10 09:00:00	ADMIN	vishnu@xyz.com
48	CHANDANA	SHARMA	27000	2015-02-10 09:00:00	ADMIN	chandana@xyz.com
49	MANISHA	SHARMA	24000	2015-02-10 09:00:00	ADMIN	manisha@xyz.com
50	PARTHAJIT	KULI	26000	2015-02-10 09:00:00	HR	parthajit@xyz.com

Task-1

1. Write an SQL query to fetch “FIRST_NAME” from the Worker table using the alias name as <WORKER_NAME>.
2. Write an SQL query to fetch unique values of DEPARTMENT from the Worker table.
3. Write an SQL query to show the last 5 records from a table.

SOLUTION

```
MySQL 8.0 Command Line Client - Unicode
mysql> Select FIRST_NAME AS WORKER_NAME from worker;
+-----+
| WORKER_NAME |
+-----+
| NIHARIKA    |
| AYUSHI      |
| PRIYANSHA   |
| APARNA      |
| SHAFALI     |
| MONI        |
| MOHAN       |
| KRISHNA     |
| LUTUKON     |
| KASTURI     |
| TONMOY      |
| NIRANJAN    |
| ANVUSHI     |
| RAKESH      |
| MEGHA       |
| KUNAL       |
| ALBERT      |
| MAHESH      |
| MRITEUNJOY  |
| JAGAT       |
| RAHUL       |
| SANJOY      |
| BIBEK       |
| JAY         |
| BISHAL      |
| PRADYUMN    |
| ANJAN       |
| DEEPAK      |
| BISHWAJIT   |
| ARPAN       |
| CHANDRA     |
| SANTOSH     |
| GANESH      |
| GITA        |
| DEVI        |
| KRANTI      |
| BIPLOV      |
| HEHO        |
| MADHAV      |
| RAHUL       |
| SAJAL       |
| DEEPAK      |
| DIPANKAR    |
| JAGAT       |
| VISHAL      |
| RAHUL       |
| VISHNU      |
| CHANDANA    |
| MANISHA     |
| PARTHAJIT   |
+-----+
50 rows in set (0.00 sec)
```

```
mysql> Select distinct DEPARTMENT from worker;
+-----+
| DEPARTMENT |
+-----+
| HR          |
| ADMIN       |
| ACCOUNTANT  |
+-----+
3 rows in set (0.01 sec)
```

```
mysql> SELECT * FROM (
-> SELECT * FROM worker ORDER BY worker_id DESC LIMIT 5) sub;
+-----+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT | EMAIL |
+-----+-----+-----+-----+-----+-----+-----+
| 50        | PARTHAJIT  | KULI      | 26000  | 2015-02-10 09:00:00 | HR          | parthajit@xyz.com |
| 49        | MANISHA    | SHARMA    | 24000  | 2015-02-10 09:00:00 | ADMIN       | manisha@xyz.com |
| 48        | CHANDANA   | SHARMA    | 27000  | 2015-02-10 09:00:00 | ADMIN       | chandana@xyz.com |
| 47        | VISHNU     | DAS       | 27000  | 2015-02-10 09:00:00 | ADMIN       | vishnu@xyz.com |
| 46        | RAHUL      | PARMANIK  | 20000  | 2015-02-10 09:00:00 | ACCOUNTANT  | rahulp@xyz.com |
+-----+-----+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

Task-2

1. Write an SQL query to print the first three characters of FIRST_NAME from Worker
2. Write an SQL query to find the position of the alphabet ('a') in the first name
3. Write an SQL query to print the name of employees who have the highest salary in each department.

Solution

1.

```
MySQL 8.0 Command Line Client - Unicode
mysql> SELECT SUBSTRING(first_name,1,3)
-> FROM worker;
+-----+
| SUBSTRING(first_name,1,3) |
+-----+
| NIH                      |
| AYU                      |
| PRI                      |
| APA                      |
| SHA                      |
| MON                      |
| MOH                      |
| KRI                      |
| LUT                      |
| KAS                      |
| TON                      |
| NIR                      |
| AAY                      |
| RAK                      |
| MEG                      |
| KUN                      |
| ALB                      |
| MAH                      |
| WRI                      |
| JAG                      |
| RAH                      |
| SAN                      |
| BIR                      |
| JAY                      |
| BIS                      |
| PRA                      |
| AND                      |
| DEE                      |
| BIS                      |
| ARP                      |
| CHA                      |
| SAN                      |
| GAN                      |
| GIT                      |
| DEV                      |
| KRA                      |
| BIP                      |
| HEM                      |
| MAD                      |
| RAH                      |
| SAD                      |
| DEE                      |
| DIP                      |
| JAG                      |
| VIS                      |
| RAH                      |
| VIS                      |
| CHA                      |
| MAN                      |
| PAR                      |
+-----+
50 rows in set (0.03 sec)
```

2.

```
mysql> Select INSTR(FIRST_NAME, BINARY'a') from worker where FIRST_NAME = 'NIHARIKA';
+-----+
| INSTR(FIRST_NAME, BINARY'a') |
+-----+
| 4                             |
+-----+
1 row in set, 1 warning (0.01 sec)
```

3.

```
mysql> select max(salary), department from worker group by department;
+-----+-----+
| max(salary) | department |
+-----+-----+
| 28000       | HR         |
| 30000       | ADMIN      |
| 25000       | ACCOUNTANT |
+-----+-----+
3 rows in set (0.03 sec)
```

Task-3

1. Write an SQL query to print the FIRST_NAME from the Worker table after removing white spaces from the right side.
2. Write an SQL query that fetches the unique values of DEPARTMENT from the Worker table and prints its length.
3. Write an SQL query to fetch nth max salaries from a table.

Solution:

1.

```
mysql> select rtrim(first_name) from worker;
```

RTRIM(FIRST_NAME)
NIHARIKA
AYUSHI
PRIYANSHA
APARNA
SHAFALI
MONI
MOHAN
KRISHNA
LUTUNON
KASTURI
TONMOY
NIRANJAN
AAYUSHI
RAKESH
MEGHA
KUNAL
ALBERT
MAHESH
MRIJUNJOY
JAGAT
RAHUL
SANJOY
BIBEK
JAY
BISHAL
PRADYUMN
ANJAN
DEEPAK
BISHWAJIT
ARPAN
CHANDRA
SANTOSH
GANESH
GITA
DEVI
KRANTI
BIPLOV
HEMO
MADHAV
RAHUL
SAJAL
DEEPAK
DIPANKAR
JAGAT
VISHAL
RAHUL
VISHNU
CHANDANA
MANISHA
PARTHAJIT

50 rows in set (0.01 sec)
2.

```
mysql> select distinct(length(department)) from worker;
```

(length(department))
6
10

2 rows in set (0.00 sec)
3.

```
mysql> SELECT * FROM worker a WHERE (1) = (SELECT count(salary) from worker b where a.salary<=b.salary);
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	EMAIL
12	NIRANJAN	SARMAH	30000	2015-02-10 09:00:00	ADMIN	niranjan@xyz.com

1 row in set (0.01 sec)

Task-4

1. Write an SQL query to print the FIRST_NAME from the Worker table after replacing 'a' with 'A'.
2. Write an SQL query to print all Worker details from the Worker table order FIRST_NAME Ascending and DEPARTMENT Descending.
3. Write an SQL query to fetch the names of workers who earn the highest salary.

Solution:

```
MySQL 8.0 Command Line Client - Unicode
mysql> SELECT REPLACE(first_name, 'a', 'A')
> FROM worker;
REPLACE(first_name, 'a', 'A')
-----
NIHARIKA
AYUSHI
PRIYANSHA
APARNA
SHAFALI
MONI
MOHAN
KRISHNA
LUTUNON
KASTURI
TONNY
NIRANJAN
AAYUSHI
RAKESH
MEGHA
KUNAL
ALBERT
MAHESH
MRITUNJOY
JAGAT
RAHUL
SANJOY
BIBEK
JAY
BISHAL
PRADHUMN
ANJAN
DEEPAK
BISHWAJIT
ARPAN
CHANDRA
SANTOSH
GANESH
GITA
DEV
KRANTI
BIPLOV
HEMO
MADHAV
RAHUL
SAJAL
DEEPAK
DIPANKAR
JAGAT
VISHAL
RAHUL
VISHNU
CHANDANA
MANISHA
PARTHAJIT
50 rows in set (0.00 sec)
```

1.

```

MySQL 8.0 Command Line Client - Unicode
Order by first_name asc, department desc' at line 1
mysql> SELECT * FROM worker ORDER BY first_name ASC, department DESC;
+-----+-----+-----+-----+-----+-----+-----+
| WORKER_ID | FIRST_NAME | LAST_NAME | SALARY | JOINING_DATE | DEPARTMENT | EMAIL |
+-----+-----+-----+-----+-----+-----+-----+
| 13 | AAYUSHI | CHAUHAN | 20000 | 2015-02-10 09:00:00 | ADMIN | aayushi@xyz.com |
| 27 | ALBERT | PINTO | 18000 | 2015-02-10 09:00:00 | ADMIN | albert@xyz.com |
| 17 | ANJAN | MAZUMDER | 17000 | 2015-08-29 09:00:00 | ACCOUNTANT | anjan@xyz.com |
| 4 | APARNA | DESHPANDE | 8000 | 2015-12-20 09:00:00 | ADMIN | aparna@xyz.com |
| 30 | ARPAN | DEB | 19000 | 2015-08-29 09:00:00 | ACCOUNTANT | arpan@xyz.com |
| 2 | AYUSHI | GURONDIA | 5000 | 2015-02-10 09:00:00 | ADMIN | ayushi@xyz.com |
| 23 | BIREK | BOSE | 17000 | 2015-08-29 09:00:00 | ACCOUNTANT | birek@xyz.com |
| 37 | BIPLOV | KHANAL | 25000 | 2015-02-10 09:00:00 | HR | biplov@xyz.com |
| 25 | BISHAL | SEN | 25000 | 2015-08-29 09:00:00 | ACCOUNTANT | bishal@xyz.com |
| 29 | BISHHAJIT | DEBNATH | 19000 | 2015-08-29 09:00:00 | ACCOUNTANT | bishhajit@xyz.com |
| 41 | CHANDANA | SHARMA | 27000 | 2015-02-10 09:00:00 | ADMIN | chandana@xyz.com |
| 38 | CHANDRA | UPADHYAY | 25000 | 2015-02-10 09:00:00 | HR | chandra@xyz.com |
| 42 | DEEPAK | SARMAH | 25000 | 2015-02-10 09:00:00 | HR | deepak@xyz.com |
| 28 | DEEPAK | DEBNATH | 18000 | 2015-08-29 09:00:00 | ACCOUNTANT | deepak@xyz.com |
| 35 | DEVI | KHANAL | 20000 | 2015-02-10 09:00:00 | HR | devi@xyz.com |
| 43 | DIPANKAR | SARMAH | 25000 | 2015-02-10 09:00:00 | HR | dipankar@xyz.com |
| 33 | GANESH | KHANAL | 25000 | 2015-02-10 09:00:00 | HR | ganesh@xyz.com |
| 34 | GITA | UPADHYAY | 20000 | 2015-02-10 09:00:00 | HR | gita@xyz.com |
| 38 | HEMO | UPADHYAY | 25000 | 2015-02-10 09:00:00 | HR | hemo@xyz.com |
| 40 | JAGAT | DAS | 20000 | 2015-02-10 09:00:00 | ADMIN | jagat@xyz.com |
| 24 | JAGAT | CHETRY | 25000 | 2015-02-10 09:00:00 | ACCOUNTANT | jagat@xyz.com |
| 24 | JAY | DEBNATH | 25000 | 2015-08-29 09:00:00 | ACCOUNTANT | jay@xyz.com |
| 10 | KASTURI | SARMAH | 28000 | 2017-08-29 09:00:00 | HR | kasturi@xyz.com |
| 36 | KRANTI | KHANAL | 25000 | 2015-02-10 09:00:00 | HR | kranti@xyz.com |
| 8 | KRISHNA | GOGOT | 22000 | 2017-08-29 09:00:00 | ACCOUNTANT | krishna@xyz.com |
| 16 | KUNAL | KUMBANG | 17000 | 2015-02-10 09:00:00 | ADMIN | kunal@xyz.com |
| 9 | LUTUKON | BORUA | 23000 | 2017-08-29 09:00:00 | HR | lutukon@xyz.com |
| 39 | MADHAV | SARMAH | 20000 | 2015-02-10 09:00:00 | HR | madhav@xyz.com |
| 15 | MAHESH | BABU | 25000 | 2015-02-10 09:00:00 | ADMIN | mahesh@xyz.com |
| 49 | MANISHA | SHARMA | 24000 | 2015-02-10 09:00:00 | ADMIN | manisha@xyz.com |
| 18 | MEGHA | KHANAL | 25000 | 2015-02-10 09:00:00 | ADMIN | megha@xyz.com |
| 7 | MOHAN | KALITA | 25000 | 2017-08-29 09:00:00 | ACCOUNTANT | mohan@xyz.com |
| 6 | MONI | KHATANJAR | 20000 | 2017-08-29 09:00:00 | ADMIN | moni@xyz.com |
| 19 | NRIHARJAY | DAS | 20000 | 2015-02-10 09:00:00 | ADMIN | nriharjay@xyz.com |
| 1 | NRIHARJAY | ARORA | 20000 | 2013-02-25 09:00:00 | HR | nriharjay@xyz.com |
| 12 | NIRANJAN | SARMAH | 30000 | 2015-02-10 09:00:00 | ADMIN | niranjan@xyz.com |
| 50 | PARTHAJIT | KULI | 26000 | 2015-02-10 09:00:00 | HR | parthajit@xyz.com |
| 26 | PRADYUMN | SHARMA | 17000 | 2015-08-29 09:00:00 | ACCOUNTANT | pradyumn@xyz.com |
| 3 | PRIYANSHA | CHOUKSEY | 25000 | 2014-05-16 09:00:00 | HR | priyansha@xyz.com |
| 40 | RAHUL | SARMAH | 22000 | 2015-02-10 09:00:00 | HR | rahul@xyz.com |
| 21 | RAHUL | JAIN | 21000 | 2015-08-29 09:00:00 | ACCOUNTANT | rahul@xyz.com |
| 46 | RAHUL | PARMANIK | 20000 | 2015-02-10 09:00:00 | ACCOUNTANT | rahul@xyz.com |
| 14 | RAMESH | ROUT | 21000 | 2015-02-10 09:00:00 | HR | rakesh@xyz.com |
| 41 | SAJAL | SARMAH | 22000 | 2015-02-10 09:00:00 | HR | sajal@xyz.com |
| 22 | SANJOY | RAO | 22000 | 2015-08-29 09:00:00 | ACCOUNTANT | sanjoy@xyz.com |
| 32 | SANTOSH | UPADHYAY | 26000 | 2015-02-10 09:00:00 | HR | santosh@xyz.com |
| 5 | SHAFALI | JAIN | 21000 | 2015-08-29 09:00:00 | ADMIN | shafali@xyz.com |
| 11 | TONYOY | KHANAL | 25000 | 2015-02-10 09:00:00 | ADMIN | tonoy@xyz.com |
| 45 | VISHAL | PAUL | 21000 | 2015-02-10 09:00:00 | ACCOUNTANT | vishal@xyz.com |
| 47 | VISHNU | DAS | 27000 | 2015-02-10 09:00:00 | ADMIN | vishnu@xyz.com |
+-----+-----+-----+-----+-----+-----+-----+
50 rows in set (0.04 sec)

```

2.

```

mysql> SELECT FIRST_NAME FROM worker
-> WHERE SALARY = (SELECT MAX(SALARY) FROM worker);
+-----+
| FIRST_NAME |
+-----+
| NIRANJAN |
+-----+
1 row in set (0.00 sec)

mysql> -

```

3.

Task-5

1. Write an SQL query to print details of workers excluding first names, “Ramesh” and “Santhosh” from the Worker table.
2. Write an SQL query to print details of the Workers whose FIRST_NAME ends with ‘h’ and contains six alphabets.
3. Write a query to validate Email of Employee (email should have first name last name and guvi.com example (first name=Kamal last name= raja and the mail id should be kamalraja@guvi.com).

Solution

```
mysql> Select * from worker where FIRST_NAME not in ('RAMESH','SANTOSH');
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	EMAIL
1	NIHAREKA	ARORA	20000	2013-02-25 09:00:00	HR	nihareka@xyz.com
2	AYUSHI	GURONDIA	5000	2015-02-10 09:00:00	ADMIN	ayushi@xyz.com
3	PRIYANSHA	CHOUKSEY	25000	2014-05-16 09:00:00	HR	priyansha@xyz.com
4	APARNA	DESHPANDE	8000	2016-12-20 09:00:00	ADMIN	aparna@xyz.com
5	SHAFALI	JAIN	21000	2015-08-29 09:00:00	ADMIN	shafali@xyz.com
6	MONI	KHATANJAR	20000	2017-08-29 09:00:00	ADMIN	moni@xyz.com
7	MOHAN	KALITA	25000	2017-08-29 09:00:00	ACCOUNTANT	mohan@xyz.com
8	KRISHNA	GOGOI	22000	2017-08-29 09:00:00	ACCOUNTANT	krishna@xyz.com
9	LUTUKON	BORUA	23000	2017-08-29 09:00:00	HR	lutukon@xyz.com
10	KASTURI	SARMAH	25000	2017-08-29 09:00:00	HR	kasturi@xyz.com
11	TOMMOY	KHANAL	25000	2015-02-10 09:00:00	ADMIN	tommo@xyz.com
12	NIRANJAN	SARMAH	30000	2015-02-10 09:00:00	ADMIN	niranjana@xyz.com
13	AYUSHI	CHAUHAN	20000	2015-02-10 09:00:00	ADMIN	ayushi@xyz.com
14	RAKESH	ROUT	21000	2015-02-10 09:00:00	ADMIN	rakesh@xyz.com
15	MEGAH	KHANAL	25000	2015-02-10 09:00:00	ADMIN	megha@xyz.com
16	KUNAL	KUMBANG	17000	2015-02-10 09:00:00	ADMIN	kunal@xyz.com
17	ALBERT	PINTO	18000	2015-02-10 09:00:00	ADMIN	albert@xyz.com
18	MAHESH	BABU	25000	2015-02-10 09:00:00	ADMIN	mahesh@xyz.com
19	WRITUNJOY	DAS	20000	2015-02-10 09:00:00	ADMIN	writunjoy@xyz.com
20	JAGAT	JAIN	20000	2015-02-10 09:00:00	ADMIN	jagat@xyz.com
21	RAHUL	JAIN	21000	2015-08-29 09:00:00	ACCOUNTANT	rahul@xyz.com
22	SANJOY	RAO	22000	2015-08-29 09:00:00	ACCOUNTANT	sanjoy@xyz.com
23	BIBEK	BOSE	17000	2015-08-29 09:00:00	ACCOUNTANT	bibek@xyz.com
24	JAY	DEVNATH	25000	2015-08-29 09:00:00	ACCOUNTANT	jay@xyz.com
25	BISHAL	SEN	25000	2015-08-29 09:00:00	ACCOUNTANT	bishal@xyz.com
26	PRADYUMN	SHARMA	17000	2015-08-29 09:00:00	ACCOUNTANT	pradyumn@xyz.com
27	ANJAN	MAZUMDER	17000	2015-08-29 09:00:00	ACCOUNTANT	anjan@xyz.com
28	DEEPAK	DEBNATH	18000	2015-08-29 09:00:00	ACCOUNTANT	deepak@xyz.com
29	BISHWAJIT	DEBNATH	19000	2015-08-29 09:00:00	ACCOUNTANT	bishwajit@xyz.com
30	ARPAN	DES	19000	2015-08-29 09:00:00	ACCOUNTANT	arpan@xyz.com
31	CHANDRA	UPADHYAY	25000	2015-02-10 09:00:00	HR	chandra@xyz.com
32	GANESH	KHANAL	25000	2015-02-10 09:00:00	HR	ganesh@xyz.com
33	GITA	UPADHYAY	20000	2015-02-10 09:00:00	HR	gita@xyz.com
34	DEVIT	KHANAL	20000	2015-02-10 09:00:00	HR	devit@xyz.com
35	KRANTI	KHANAL	25000	2015-02-10 09:00:00	HR	kranti@xyz.com
36	BIPLOV	KHANAL	25000	2015-02-10 09:00:00	HR	biplov@xyz.com
37	HEMO	UPADHYAY	25000	2015-02-10 09:00:00	HR	hemoo@xyz.com
38	MADHAV	SARMAH	20000	2015-02-10 09:00:00	HR	madhav@xyz.com
39	RAHUL	SARMAH	22000	2015-02-10 09:00:00	HR	rahul@xyz.com
40	SAJAL	SARMAH	22000	2015-02-10 09:00:00	HR	sajal@xyz.com
41	DEEPAK	SARMAH	25000	2015-02-10 09:00:00	HR	deepak@xyz.com
42	DIPANKAR	SARMAH	25000	2015-02-10 09:00:00	HR	dipankar@xyz.com
43	JAGAT	CHETRY	25000	2015-02-10 09:00:00	ACCOUNTANT	jagat@xyz.com
44	VISHAL	PAUL	21000	2015-02-10 09:00:00	ACCOUNTANT	vishal@xyz.com
45	RAHUL	PARMANIK	20000	2015-02-10 09:00:00	ACCOUNTANT	rahul@xyz.com
46	VISHNU	DAS	27000	2015-02-10 09:00:00	ADMIN	vishnu@xyz.com
47	CHANDANA	SHARMA	27000	2015-02-10 09:00:00	ADMIN	chandana@xyz.com
48	MANISHA	SHARMA	24000	2015-02-10 09:00:00	ADMIN	manisha@xyz.com
49	PARTHAJIT	KULI	26000	2015-02-10 09:00:00	HR	parthajit@xyz.com
50						

49 rows in set (0.03 sec)

1. mysql>

```
mysql> Select * from worker where FIRST_NAME like '____h';
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	EMAIL
14	RAKESH	ROUT	21000	2015-02-10 09:00:00	ADMIN	rakesh@xyz.com
18	MAHESH	BABU	25000	2015-02-10 09:00:00	ADMIN	mahesh@xyz.com
33	GANESH	KHANAL	25000	2015-02-10 09:00:00	HR	ganesh@xyz.com

3 rows in set (0.00 sec)

2. mysql>

```
mysql> SELECT * FROM Worker WHERE email NOT LIKE '%_@_._%';
```

Empty set (0.00 sec)

3. mysql>

Task-6

1. Write an SQL query to print details of the Workers who have joined in March '2021.
2. Write an SQL query to fetch duplicates that have matching data in some fields of a table.
3. How to remove duplicate rows from the Employees table.

Solution

```
mysql> select * from worker where year(JOINING_DATE) = 2021 and month(JOINING_DATE) = 3;
```

Empty set (0.00 sec)

1. mysql> -

```
mysql> SELECT FIRST_NAME, LAST_NAME, email, COUNT(*)  
-> FROM worker  
-> GROUP BY FIRST_NAME, LAST_NAME, email  
-> HAVING COUNT(*) > 1;  
Empty set (0.01 sec)
```

- 2.
3. `SELECT [FirstName],
[LastName],
[Email],
COUNT(*) AS CNT
FROM [SampleDB].[dbo].[Employees]
GROUP BY [FirstName],
[LastName],
[Email]
HAVING COUNT(*) > 1;`

Task-7

1. Write an SQL query to show only odd rows from a table.
2. Write an SQL query to clone a new table from another table.

Solution


```
mysql> SELECT * FROM worker
-> WHERE WORKER_ID IN(SELECT WORKER_ID FROM worker WHERE WORKER_ID%2 <> 0);
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	EMAIL
1	NIHARIKA	ARORA	20000	2013-02-25 09:00:00	HR	niharika@xyz.com
3	PRIYANSHA	CHOUKSEY	25000	2014-05-16 09:00:00	HR	priyansha@xyz.com
5	SHAFALI	JAIN	21000	2015-08-29 09:00:00	ADMIN	shafali@xyz.com
7	MOHAN	KALITA	25000	2017-08-29 09:00:00	ACCOUNTANT	mohan@xyz.com
9	LUTUKON	BORUA	23000	2017-08-29 09:00:00	HR	lutukon@xyz.com
11	TOMMOY	KHANAL	25000	2015-02-10 09:00:00	ADMIN	tommo@xyz.com
13	AYUSHI	CHAUHAN	20000	2015-02-10 09:00:00	ADMIN	ayushi@xyz.com
15	MEGAH	KHANAL	25000	2015-02-10 09:00:00	ADMIN	megha@xyz.com
17	ALBERT	PINTO	18000	2015-02-10 09:00:00	ADMIN	albert@xyz.com
19	MRTUNJOY	DAS	20000	2015-02-10 09:00:00	ADMIN	mritunjoy@xyz.com
21	RAHUL	JAIN	21000	2015-08-29 09:00:00	ACCOUNTANT	rahul@xyz.com
23	BIBEK	BOSE	17000	2015-08-29 09:00:00	ACCOUNTANT	bibek@xyz.com
25	BISHAL	SEN	25000	2015-08-29 09:00:00	ACCOUNTANT	bishal@xyz.com
27	ANJAN	MAZUMDER	17000	2015-08-29 09:00:00	ACCOUNTANT	anjan@xyz.com
29	BISHWAJIT	DEBNATH	19000	2015-08-29 09:00:00	ACCOUNTANT	bishwajit@xyz.com
31	CHANDRA	UPADHAYAY	25000	2015-02-10 09:00:00	HR	chandra@xyz.com
33	GANESH	KHANAL	25000	2015-02-10 09:00:00	HR	ganesh@xyz.com
35	DEVI	KHANAL	20000	2015-02-10 09:00:00	HR	devi@xyz.com
37	BIPLOV	KHANAL	25000	2015-02-10 09:00:00	HR	biplov@xyz.com
39	MADHAV	SARMAH	20000	2015-02-10 09:00:00	HR	madhav@xyz.com
41	SAJAL	SARMAH	22000	2015-02-10 09:00:00	HR	sajal@xyz.com
43	DIPANKAR	SARMAH	25000	2015-02-10 09:00:00	HR	dipankar@xyz.com
45	VISHAL	PAUL	21000	2015-02-10 09:00:00	ACCOUNTANT	vishal@xyz.com
47	VISHNU	DAS	27000	2015-02-10 09:00:00	ADMIN	vishnu@xyz.com
49	MANISHA	SHARMA	24000	2015-02-10 09:00:00	ADMIN	manisha@xyz.com

1. 25 rows in set (0.03 sec)

```
mysql> CREATE TABLE new_table SELECT * FROM worker;
Query OK, 50 rows affected (0.05 sec)
Records: 50 Duplicates: 0 Warnings: 0

mysql> SELECT * FROM new_table;
```

WORKER_ID	FIRST_NAME	LAST_NAME	SALARY	JOINING_DATE	DEPARTMENT	EMAIL
1	NIHARIKA	ARORA	20000	2013-02-25 09:00:00	HR	niharika@xyz.com
2	AYUSHI	GURONDIA	5000	2015-02-10 09:00:00	ADMIN	ayushi@xyz.com
3	PRIYANSHA	CHOUKSEY	25000	2014-05-16 09:00:00	HR	priyansha@xyz.com
4	APARNA	DESHPANDE	8000	2016-12-20 09:00:00	ADMIN	aparna@xyz.com
5	SHAFALI	JAIN	21000	2015-08-29 09:00:00	ADMIN	shafali@xyz.com
6	MONI	KHATANIAR	5000	2017-08-29 09:00:00	ADMIN	moni@xyz.com
7	MOHAN	KALITA	25000	2017-08-29 09:00:00	ACCOUNTANT	mohan@xyz.com
8	KRISHNA	GOGI	2000	2017-08-29 09:00:00	ACCOUNTANT	krishna@xyz.com
9	LUTUKON	BORUA	23000	2017-08-29 09:00:00	HR	lutukon@xyz.com
10	KASTURI	SARMAH	2000	2017-08-29 09:00:00	HR	kasturi@xyz.com
11	TOMMOY	KHANAL	25000	2015-02-10 09:00:00	ADMIN	tommo@xyz.com
12	NIRANJAN	SARMAH	30000	2015-02-10 09:00:00	ADMIN	niranjan@xyz.com
13	AYUSHI	CHAUHAN	20000	2015-02-10 09:00:00	ADMIN	ayushi@xyz.com
14	RAKESH	ROUT	21000	2015-02-10 09:00:00	ADMIN	rakesh@xyz.com
15	MEGAH	KHANAL	25000	2015-02-10 09:00:00	ADMIN	megha@xyz.com
16	KUNAL	KUMBANG	17000	2015-02-10 09:00:00	ADMIN	kunal@xyz.com
17	ALBERT	PINTO	18000	2015-02-10 09:00:00	ADMIN	albert@xyz.com
18	MAHESH	RABU	25000	2015-02-10 09:00:00	ADMIN	mahesh@xyz.com
19	MRTUNJOY	DAS	20000	2015-02-10 09:00:00	ADMIN	mritunjoy@xyz.com
20	JAGAT	DAS	30000	2015-02-10 09:00:00	ADMIN	jagat@xyz.com
21	RAHUL	JAIN	21000	2015-08-29 09:00:00	ACCOUNTANT	rahul@xyz.com
22	SANJOY	RAO	20000	2015-08-29 09:00:00	ACCOUNTANT	sanjoy@xyz.com
23	BIBEK	BOSE	17000	2015-08-29 09:00:00	ACCOUNTANT	bibek@xyz.com
24	JAY	DEVNATH	25000	2015-08-29 09:00:00	ACCOUNTANT	jay@xyz.com
25	BISHAL	SEN	25000	2015-08-29 09:00:00	ACCOUNTANT	bishal@xyz.com
26	PRADYUMN	SHARMA	17000	2015-08-29 09:00:00	ACCOUNTANT	pradyumn@xyz.com
27	ANJAN	DEB	17000	2015-08-29 09:00:00	ACCOUNTANT	anjan@xyz.com
28	DEEPAK	DEBNATH	18000	2015-08-29 09:00:00	ACCOUNTANT	deepak@xyz.com
29	BISHWAJIT	DEBNATH	19000	2015-08-29 09:00:00	ACCOUNTANT	bishwajit@xyz.com
30	ARPAN	DEB	19000	2015-08-29 09:00:00	ACCOUNTANT	arpan@xyz.com
31	CHANDRA	UPADHAYAY	25000	2015-02-10 09:00:00	HR	chandra@xyz.com
32	SANTOSH	UPADHAYAY	26000	2015-02-10 09:00:00	HR	santosh@xyz.com
33	GANESH	KHANAL	25000	2015-02-10 09:00:00	HR	ganesh@xyz.com
34	GITA	UPADHAYAY	20000	2015-02-10 09:00:00	HR	gita@xyz.com
35	DEVI	KHANAL	20000	2015-02-10 09:00:00	HR	devi@xyz.com
36	KRANTI	KHANAL	25000	2015-02-10 09:00:00	HR	kranti@xyz.com
37	BIPLOV	KHANAL	25000	2015-02-10 09:00:00	HR	biplov@xyz.com
38	HEMO	UPADHAYAY	25000	2015-02-10 09:00:00	HR	hemu@xyz.com
39	MADHAV	SARMAH	20000	2015-02-10 09:00:00	HR	madhav@xyz.com
40	RAHUL	SARMAH	22000	2015-02-10 09:00:00	HR	rahul@xyz.com
41	SAJAL	SARMAH	22000	2015-02-10 09:00:00	HR	sajal@xyz.com
42	DEEPAK	SARMAH	25000	2015-02-10 09:00:00	HR	deepak@xyz.com
43	DIPANKAR	SARMAH	25000	2015-02-10 09:00:00	HR	dipankar@xyz.com
44	JAGAT	CHETRY	25000	2015-02-10 09:00:00	ACCOUNTANT	jagat@xyz.com
45	VISHAL	PAUL	21000	2015-02-10 09:00:00	ACCOUNTANT	vishal@xyz.com
46	RAHUL	PARMANIK	20000	2015-02-10 09:00:00	ACCOUNTANT	rahul@xyz.com
47	VISHNU	DAS	27000	2015-02-10 09:00:00	ADMIN	vishnu@xyz.com
48	CHANDANA	SHARMA	27000	2015-02-10 09:00:00	ADMIN	chandana@xyz.com
49	MANISHA	SHARMA	24000	2015-02-10 09:00:00	ADMIN	manisha@xyz.com
50	PARTHAJIT	KULI	26000	2015-02-10 09:00:00	ADMIN	parthajit@xyz.com

2. 50 rows in set (0.00 sec)

Task-9

- Write an SQL query to show the top n (say 15) records of a table.
- Write an SQL query to determine the nth (say n=10) highest salary from a table.

Solution

```
mysql> SELECT WORKER_ID, FIRST_NAME
-> FROM worker LIMIT 10;
```

WORKER_ID	FIRST_NAME
1	NIHARIKA
2	AYUSHI
3	PRIYANSHA
4	APARNA
5	SHAFALI
6	MONI
7	MOHAN
8	KRISHNA
9	LUTUKON
10	KASTURI

1. 10 rows in set (0.00 sec)

```
mysql> Select Salary From worker order by Salary DESC limit 9,1;
```

Salary
25000
25000

2. 1 row in set (0.00 sec)

Task-10

- Write an SQL query to determine the 8th highest salary without using TOP or LIMIT methods.
- Write an SQL query to fetch the list of employees with the same salary.

Solution

1.

```
mysql> SELECT DISTINCT(Salary) FROM worker ORDER BY Salary DESC LIMIT 7,1;
+-----+
| Salary |
+-----+
| 22000  |
+-----+
1 row in set (0.03 sec)
```

2.

```
mysql> Select distinct a.WORKER_ID, a.FIRST_NAME, a.SALARY from worker a, worker al
> where a.SALARY = al.SALARY and a.WORKER_ID != al.WORKER_ID;
+-----+-----+-----+
| WORKER_ID | FIRST_NAME | SALARY |
+-----+-----+-----+
| 46        | RAHUL      | 20000  |
| 39        | MADHAV     | 20000  |
| 35        | DEVI       | 20000  |
| 34        | GIITA      | 20000  |
| 20        | JAGAT      | 20000  |
| 19        | MRITUNJOY  | 20000  |
| 13        | AAVUSHI    | 20000  |
| 6         | MONI       | 20000  |
| 44        | JAGAT      | 25000  |
| 43        | DIPANKAR   | 25000  |
| 42        | DEEPAK     | 25000  |
| 38        | HEMU       | 25000  |
| 37        | BIPLOV     | 25000  |
| 36        | KRANTI     | 25000  |
| 33        | GANESH     | 25000  |
| 31        | CHANDRA    | 25000  |
| 25        | BISHAL     | 25000  |
| 24        | JAY        | 25000  |
| 18        | MAHESH     | 25000  |
| 15        | MEGHA      | 25000  |
| 11        | TONMOY     | 25000  |
| 7         | MOHAN      | 25000  |
| 45        | VISHAL     | 21000  |
| 21        | RAHUL      | 21000  |
| 14        | RAKESH     | 21000  |
| 1         | RIHARIKA   | 20000  |
| 3         | PRIVANSHA  | 25000  |
| 41        | SAJAL      | 22000  |
| 40        | RAHUL      | 22000  |
| 22        | SANJOY     | 22000  |
| 5         | SHAFALI    | 21000  |
| 27        | ANJAN      | 17000  |
| 26        | PRADYUMN   | 17000  |
| 23        | BIBEK      | 17000  |
| 28        | DEEPAK     | 18000  |
| 8         | KRESHNA    | 22000  |
| 16        | KUNAL      | 17000  |
| 17        | ALBERT     | 18000  |
| 30        | ARPAN      | 19000  |
| 29        | BISHWAJIT  | 19000  |
| 30        | PARTHAJIT  | 26000  |
| 48        | CHANDANA   | 27000  |
| 47        | VISHNU     | 27000  |
| 32        | SANTOSH    | 26000  |
+-----+-----+-----+
14 rows in set (0.00 sec)

mysql> -
```