#### CREATE TABLE EMP (

- -> EID INT NOT NULL PRIMARY KEY, FNAME VARCHAR(20) NOT NULL,
- -> LNAME VARCHAR(20) NOT NULL,
- -> DOB DATE NOT NULL,
- -> GENDER ENUM('m', 'f', 'o') NOT NULL,
- -> JOB VARCHAR(20) NOT NULL,
- -> MGR INT NULL,
- -> DOJ DATE NOT NULL,
- -> SAL DECIMAL(10, 2) NOT NULL,
- -> COMM DECIMAL(10, 2) NULL,
- -> DNO INT NULL,
- -> CID INT NULL
- -> );

INSERT INTO EMP VALUES (1701, 'RAHUL', 'MUKARJEE', '1991-02-19', 'm', 'MANAGER', 1702, '2017-04-17', 100000.00, NULL, 111, NULL);

INSERT INTO EMP VALUES (1702, 'SAMEER', 'KHAN', '1995-04-20', 'm', 'MANAGER', 2001, '2017-07-07', 90000.00, NULL, 110, NULL);

INSERT INTO EMP VALUES (1801, 'JAHNAVI', 'NAIK', '1996-04-11', 'f', 'DISPATCHER', 1702, '2020-02-15', 450000.00, 1000.00, 110, NULL);

INSERT INTO EMP VALUES (1901, 'SHIVANI', 'RAI', '1998-11-07', 'f', 'TESTER', 2201, '2019-12-12', 450000.00, NULL, 113, 502);

INSERT INTO EMP VALUES (1902, 'ABHIJIT', 'GOWDA', '1997-12-25', 'm', 'DISPATCHER', 1702, '2019-02-28', 50000.00, NULL, 110, 505);

INSERT INTO EMP VALUES (1903, 'KARAN', 'BHAT', '1997-12-26', 'm', 'SALESMAN', 1701, '2019-12-26', 45000.00, NULL, 111, 506);

INSERT INTO EMP VALUES (2001, 'MURALI', 'KRISHNAN', '1998-06-08', 'm', 'DISPATCHER', 2201, '2020-03-15', 45000.00, 1000.00, 110, NULL);

INSERT INTO EMP VALUES (2002, 'DHARANI', 'PATIL', '1998-11-10', 'f', 'DEVELOPER', 2001, '2021-06-20', 30000.00, 3000.00, 113, NULL);

INSERT INTO EMP VALUES (2101, 'RASHMI', 'GONDA', '1995-10-03', 'f', 'SALESMAN', 1701, '2021-01-02', 45000.00, 3000.00, 111, NULL);

INSERT INTO EMP VALUES (2102, 'FARIYA', 'TAJ', '1999-01-03', 'f', 'DEVELOPER', 2001, '2021-03-01', 32000.00, 3600.00, 113, NULL);

INSERT INTO EMP VALUES (2103, 'PRIYA', 'SHETTY', '1998-03-20', 'f', 'ACCOUNTANT', 2001, '2021-05-01', 32000.00, 3600.00, 112, NULL);

INSERT INTO EMP VALUES (2104, 'AMAN', 'RAI', '1998-08-15', 'm', 'SALESMAN', 1701, '2021-12-26', 40000.00, NULL, 111, NULL);

INSERT INTO EMP VALUES (2201, 'KIRAN', 'RAJ', '1999-09-21', 'm', 'ACCOUNTANT', NULL, '2022-08-28', 30000.00, 3600.00, 115, 503);

### **Another Table**

### CREATE TABLE DEPT ( -> DNO INT NOT NULL PRIMARY KEY, -> DNAME VARCHAR(45) NOT NULL, -> LID INT -> ); Query OK, 0 rows affected (0.05 sec) mysal> desc dept; +----+ | Field | Type | Null | Key | Default | Extra | +----+ | DNO | int | NO | PRI | NULL | | | DNAME | varchar(45) | NO | | NULL | |LID | int | YES | NULL | | +----+ 3 rows in set (0.00 sec) mysql> CREATE TABLE LOCATION ( -> LID INT NOT NULL PRIMARY KEY, -> LOCATION VARCHAR(45) NOT NULL, -> CITY VARCHAR(45) NOT NULL, -> STATE VARCHAR(45) NOT NULL -> ); Query OK, 0 rows affected (0.06 sec) mysql> desc location; +----+ | Field | Type | Null | Key | Default | Extra | +----+

#### mysql> CREATE TABLE CUSTOMER (

4 rows in set (0.00 sec)

- -> CID INT NOT NULL PRIMARY KEY,
- -> FIRST\_NAME VARCHAR(45) NOT NULL,

```
-> LAST_NAME VARCHAR(45) NOT NULL,
 -> LID INT,
 -> ORDER ID INT,
 -> PRODUCT_ID INT
 -> );
Query OK, 0 rows affected (0.07 sec)
mysql>
CREATE TABLE PRODUCT (
 -> PRODUCT_ID INT NOT NULL PRIMARY KEY,
 -> PNAME VARCHAR(45) NOT NULL,
 -> PRICE DECIMAL(12, 2) NOT NULL
 ->);
CREATE TABLE ORDERS (
 -> ORDER ID INT NOT NULL PRIMARY KEY,
 -> PRODUCT ID INT NOT NULL,
 -> ORDER DATE DATE NOT NULL,
 -> DELIVERY_DATE DATE NOT NULL,
 -> EID INT NOT NULL
 ->);
INSERT INTO DEPT VALUES
 -> (110, 'DELIVERY', 2),
 -> (111, 'MARKETING', 1),
 -> (112, 'ACCOUNTING', 4),
 -> (113, 'TECHNICAL', 10),
 -> (114, 'HR', 12);
Query OK, 5 rows affected (0.01 sec)
Records: 5 Duplicates: 0 Warnings: 0
mysql> select * from dept;
+----+
| DNO | DNAME | LID |
+----+
| 110 | DELIVERY | 2 |
| 111 | MARKETING | 1 |
| 112 | ACCOUNTING | 4 |
| 113 | TECHNICAL | 10 |
+----+
5 rows in set (0.00 sec)
mysql> INSERT INTO LOCATION VALUES
 -> (1, 'VIJAYANAGAR', 'BANGALORE', 'KARNATAKA'),
 -> (2, 'HEBBAL', 'MYSORE', 'KARNATAKA'),
 -> (3, 'RAJAJINAGAR', 'BANGALORE', 'KARNATAKA'),
 -> (4, 'KORMANGALA', 'BANGALORE', 'KARNATAKA'),
```

```
-> (5, 'KUVEMPUNAGAR', 'MYSORE', 'KARNATAKA'),
```

- -> (6, 'AMEERPET', 'HYDERABAD', 'TELANGANA'),
- -> (7, 'RAIDURG', 'HYDERABAD', 'TELANGANA'),
- -> (8, 'DILSUKHNAGAR', 'HYDERABAD', 'TELANGANA'),
- -> (9, 'MARINA', 'CHENNAI', 'TAMIL\_NADU'),
- -> (10, 'ANNA\_NAGAR', 'CHENNAI', 'TAMIL\_NADU'),
- -> (11, 'SAIDAPET', 'CHENNAI', 'TAMIL NADU'),
- -> (12, 'ANDHERI', 'MUMBAI', 'MAHARASHTRA'),
- -> (13, 'JUHU', 'MUMBAI', 'MAHARASHTRA'),
- -> (14, 'GOREGAON', 'MUMBAI', 'MAHARASHTRA'),
- -> (15, 'BORIVALI', 'MUMBAI', 'MAHARASHTRA');

Query OK, 15 rows affected (0.01 sec)

Records: 15 Duplicates: 0 Warnings: 0

#### **INSERT INTO CUSTOMER VALUES**

- -> (501, 'SALMAN', 'KHAN', 12, 1201, 809),
- -> (502, 'SHIVANI', 'RAI', 1, NULL, NULL),
- -> (503, 'KIRAN', 'RAJ', 2, NULL, NULL),
- -> (504, 'VIHAN', 'PRASAD', 7, NULL, NULL),
- -> (505, 'ABHIJIT', 'GOWDA', 11, 1111, 801),
- -> (506, 'KARAN', 'BHAT', 9, NULL, NULL),
- -> (507, 'HEMA', 'SHETTY', 3, 1127, 805),
- -> (508, 'PUNITH', 'GOWDA', 4, NULL, NULL),
- -> (509, 'PATRICK', 'JOHNSON', 13, NULL, NULL),
- -> (510, 'JEEVAN', 'RAJ', 10, NULL, NULL),
- -> (511, 'SELVA', 'MANI', 12, 1773, 802),
- -> (512, 'IRFAN', 'MOHAMMED', 5, NULL, NULL);

Query OK, 12 rows affected (0.17 sec)

Records: 12 Duplicates: 0 Warnings: 0

#### **INSERT INTO PRODUCT VALUES**

- -> (801, 'LIPSTICK', 2000.00),
- -> (802, 'CHAIN', 20000.00),
- -> (803, 'WATCH', 15000.00),
- -> (804, 'EAR PODS', 1500.00),
- -> (805, 'OLDMONK', 1000.00),
- -> (806, 'IPHONE', 1300.00),
- -> (807, 'WALLET', 2500.00),
- -> (808, 'PTron', 800.00),
- -> (809, 'TOWEL', 1750.00);

Query OK, 9 rows affected (0.17 sec)

Records: 9 Duplicates: 0 Warnings: 0

#### mysql> INSERT INTO ORDERS VALUES

- -> (1111, 801, '2022-11-10', '2022-11-12', 1801),
- -> (1127, 805, '2022-11-28', '2022-12-01', 1902),
- -> (1201, 809, '2022-12-05', '2022-12-08', 2001),
- -> (1773, 802, '2022-12-19', '2022-12-22', 2201);

Query OK, 4 rows affected (0.07 sec)

Records: 4 Duplicates: 0 Warnings: 0

#### Wqtd emp first\_name and last\_name from emp table

```
SELECT FNAME, LNAME
 -> FROM EMP;
+----+
| FNAME | LNAME |
+----+
| RAHUL | MUKARJEE |
| SAMEER | KHAN |
| JAHNAVI | NAIK |
| SHIVANI | RAI |
| ABHIJIT | GOWDA |
| KARAN | BHAT |
| MURALI | KRISHNAN |
| DHARANI | PATIL |
| RASHMI | GONDA |
| FARIYA | TAJ
| PRIYA | SHETTY |
AMAN RAI
KIRAN RAJ
+----+
13 rows in set (0.00 sec)
WQTD EMP FNMAE, DOB, AND JOB FROM EMP????????????????
mysql> SELECT FNAME, DOB, JOB
 -> FROM EMP;
+----+
| FNAME | DOB | JOB |
+----+
| RAHUL | 1991-02-19 | MANAGER |
| SAMEER | 1995-04-20 | MANAGER |
| JAHNAVI | 1996-04-11 | DISPATCHER |
| SHIVANI | 1998-11-07 | TESTER |
| ABHIJIT | 1997-12-25 | DISPATCHER |
| KARAN | 1997-12-26 | SALESMAN |
| MURALI | 1998-06-08 | DISPATCHER |
| DHARANI | 1998-11-10 | DEVELOPER |
| RASHMI | 1995-10-03 | SALESMAN |
| FARIYA | 1999-01-03 | DEVELOPER |
| PRIYA | 1998-03-20 | ACCOUNTANT |
| AMAN | 1998-08-15 | SALESMAN |
```

WQTD EMP FNMAE,DOB,MGR SAL,DNO FROM EMP?????????

| KIRAN | 1999-09-21 | ACCOUNTANT |

+-----+ 13 rows in set (0.00 sec)

# SELECT FNAME,DOB,MGR,SAL,DNO -> FROM EMP;

```
+----+
| FNAME | DOB | MGR | SAL | DNO |
+----+
| RAHUL | 1991-02-19 | 1702 | 100000.00 | 111 |
| SAMEER | 1995-04-20 | 2001 | 90000.00 | 110 |
| JAHNAVI | 1996-04-11 | 1702 | 450000.00 | 110 |
| SHIVANI | 1998-11-07 | 2201 | 450000.00 | 113 |
| ABHIJIT | 1997-12-25 | 1702 | 50000.00 | 110 |
| KARAN | 1997-12-26 | 1701 | 45000.00 | 111 |
| MURALI | 1998-06-08 | 2201 | 45000.00 | 110 |
| DHARANI | 1998-11-10 | 2001 | 30000.00 | 113 |
| RASHMI | 1995-10-03 | 1701 | 45000.00 | 111 |
| FARIYA | 1999-01-03 | 2001 | 32000.00 | 113 |
| PRIYA | 1998-03-20 | 2001 | 32000.00 | 112 |
| AMAN | 1998-08-15 | 1701 | 40000.00 | 111 |
| KIRAN | 1999-09-21 | NULL | 30000.00 | 115 |
+----+
13 rows in set (0.00 sec)
```

#### ALL THE DETAILS FROM THE EMP TABLE

#### SELECT \* FROM EMP;

```
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
```

```
| 2103 | PRIYA | SHETTY | 1998-03-20 | f
                                 | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m
                                 | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
13 rows in set (0.00 sec)
mysql>
SELECT FNAME, JOB, SAL*12
 -> FROM EMP;
+----+
| FNAME | JOB | SAL*12
+----+
| RAHUL | MANAGER | 1200000.00 |
| SAMEER | MANAGER | 1080000.00 |
| JAHNAVI | DISPATCHER | 5400000.00 |
| SHIVANI | TESTER | 5400000.00 |
| ABHIJIT | DISPATCHER | 600000.00 |
| KARAN | SALESMAN | 540000.00 |
| MURALI | DISPATCHER | 540000.00 |
| DHARANI | DEVELOPER | 360000.00 |
| RASHMI | SALESMAN | 540000.00 |
| FARIYA | DEVELOPER | 384000.00 |
| PRIYA | ACCOUNTANT | 384000.00 |
| AMAN | SALESMAN | 480000.00 |
| KIRAN | ACCOUNTANT | 360000.00 |
+----+
13 rows in set (0.00 sec)
WQTD EMP FNA,E., DATE OF JOINING, AN D SAL WITH 20000 BONUS?????????
mysql> SELECT FNAME, DOJ, SAL+20000
 -> FROM EMP;
+----+
| FNAME | DOJ | SAL+20000 |
+----+
```

| RAHUL | 2017-04-17 | 120000.00 | | SAMEER | 2017-07-07 | 110000.00 | | JAHNAVI | 2020-02-15 | 470000.00 | | SHIVANI | 2019-12-12 | 470000.00 | | ABHIJIT | 2019-02-28 | 70000.00 | | KARAN | 2019-12-26 | 65000.00 | | MURALI | 2020-03-15 | 65000.00 | | DHARANI | 2021-06-20 | 50000.00 |

```
| RASHMI | 2021-01-02 | 65000.00 |
| FARIYA | 2021-03-01 | 52000.00 |
| PRIYA | 2021-05-01 | 52000.00 |
| AMAN | 2021-12-26 | 60000.00 |
| KIRAN | 2022-08-28 | 50000.00 |
| +-----+
```

#### WOT DETAILS OF THE EMPS ALONG WITH ANNUAL COMMISION??

```
SELECT *, COMM*12
 -> FROM EMP;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID | COMM*12 |
----+
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL | NULL |
                                     | MANAGER | 2001 | 2017-07-07 |
| 1702 | SAMEER | KHAN | 1995-04-20 | m
90000.00 | NULL | 110 | NULL | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL | 12000.00 |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m
                                     | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 | NULL |
| 1903 | KARAN | BHAT | 1997-12-26 | m
                                    | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 | NULL |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m
                                      | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL | 12000.00 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL | 36000.00 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f
                                     | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL | 36000.00 |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL | 43200.00 |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f
                                  | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL | 43200.00 |
| 2104 | AMAN | RAI | 1998-08-15 | m
                                   | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m
                                  | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 | 43200.00 |
----+
```

13 rows in set (0.00 sec)

```
mysql> SELECT FNAME, LNAME, JOB, SAL+(SAL*10/100)
 -> FROM EMP;
+----+
| FNAME | LNAME | JOB | SAL+(SAL*10/100) |
+----+
| RAHUL | MUKARJEE | MANAGER | 110000.000000 |
| SAMEER | KHAN | MANAGER | 99000.000000 |
| JAHNAVI | NAIK | DISPATCHER | 495000.000000 |
| SHIVANI | RAI | TESTER | 495000.000000 |
ABHIJIT | GOWDA | DISPATCHER | 55000.000000 |
| KARAN | BHAT | SALESMAN | 49500.000000 |
| MURALI | KRISHNAN | DISPATCHER | 49500.000000 |
| RASHMI | GONDA | SALESMAN | 49500.000000 |
| FARIYA | TAJ | DEVELOPER | 35200.000000 |
| PRIYA | SHETTY | ACCOUNTANT | 35200.000000 |
| AMAN | RAI | SALESMAN | 44000.000000 |
| KIRAN | RAJ | ACCOUNTANT | 33000.000000 |
+-----+
13 rows in set (0.00 sec)
```

WQTD EMP FNAME, LNAME, DNO, MGR, SAL WITH 5% DEDUVTION?????????

```
-> FROM EMP;
+-----+
| FNAME | LNAME | DNO | MGR | SAL-(SAL*5/100) |
+----+
| RAHUL | MUKARJEE | 111 | 1702 | 95000.000000 |
| SAMEER | KHAN | 110 | 2001 | 85500.000000 |
| JAHNAVI | NAIK | 110 | 1702 | 427500.000000 |
| SHIVANI | RAI | 113 | 2201 | 427500.000000 |
| ABHIJIT | GOWDA | 110 | 1702 | 47500.000000 |
| KARAN | BHAT | 111 | 1701 | 42750.000000 |
| MURALI | KRISHNAN | 110 | 2201 | 42750.000000 |
| DHARANI | PATIL | 113 | 2001 | 28500.000000 |
| RASHMI | GONDA | 111 | 1701 | 42750.000000 |
| FARIYA | TAJ | 113 | 2001 | 30400.000000 |
| PRIYA | SHETTY | 112 | 2001 | 30400.000000 |
| AMAN | RAI | 111 | 1701 | 38000.000000 |
| KIRAN | RAJ | 115 | NULL | 28500.000000 |
+----+
```

13 rows in set (0.00 sec)

SELECT FNAME, LNAME, DNO, MGR, SAL-(SAL\*5/100)

```
select Fname,Iname,job,dob,sal-(sal*14/100),comm*12
 -> from emp;
+-----+
| Fname | Iname | job | dob | sal-(sal*14/100) | comm*12 |
+-----+
| RAHUL | MUKARJEE | MANAGER | 1991-02-19 | 86000.000000 | NULL |
SAMEER | KHAN | MANAGER | 1995-04-20 | 77400.000000 | NULL |
| JAHNAVI | NAIK | DISPATCHER | 1996-04-11 | 387000.000000 | 12000.00 |
| ABHIJIT | GOWDA | DISPATCHER | 1997-12-25 | 43000.000000 | NULL |
| KARAN | BHAT | SALESMAN | 1997-12-26 | 38700.000000 | NULL |
| MURALI | KRISHNAN | DISPATCHER | 1998-06-08 | 38700.000000 | 12000.00 |
| DHARANI | PATIL | DEVELOPER | 1998-11-10 | 25800.000000 | 36000.00 |
| RASHMI | GONDA | SALESMAN | 1995-10-03 | 38700.000000 | 36000.00 |
| FARIYA | TAJ | DEVELOPER | 1999-01-03 | 27520.000000 | 43200.00 |
PRIYA | SHETTY | ACCOUNTANT | 1998-03-20 | 27520.000000 | 43200.00 |
| AMAN | RAI | SALESMAN | 1998-08-15 | 34400.000000 | NULL |
| KIRAN | RAJ | ACCOUNTANT | 1999-09-21 | 25800.000000 | 43200.00 |
+-----+
13 rows in set (0.00 sec)
Annual sallary with 8% hike????
select fname,dob,sal,(sal*12)+((sal*12)*8/100)
 -> from emp:
+----+----
| fname | dob | sal | (sal*12)+((sal*12)*8/100) |
| RAHUL | 1991-02-19 | 100000.00 |
                                   1296000.000000 |
| SAMEER | 1995-04-20 | 90000.00 |
                                   1166400.000000 |
| JAHNAVI | 1996-04-11 | 450000.00 |
                                   5832000.000000 |
| SHIVANI | 1998-11-07 | 450000.00 |
                                   5832000.000000 |
| ABHIJIT | 1997-12-25 | 50000.00 |
                                  648000.000000 |
| KARAN | 1997-12-26 | 45000.00 |
                                   583200.000000 l
| MURALI | 1998-06-08 | 45000.00 |
                                   583200.000000 |
| DHARANI | 1998-11-10 | 30000.00 |
                                   388800.000000 |
| RASHMI | 1995-10-03 | 45000.00 |
                                   583200.000000 |
| FARIYA | 1999-01-03 | 32000.00 |
                                  414720.000000 |
| PRIYA | 1998-03-20 | 32000.00 |
                                  414720.000000 |
| AMAN | 1998-08-15 | 40000.00 |
                                  518400.000000 |
| KIRAN | 1999-09-21 | 30000.00 |
                                  388800.000000 |
+----+
13 rows in set (0.00 sec)
Annual comm with 10% hike and salary with 4% deduction???
select fname,dob,mgr,(comm*12)+((comm*12)*10/100),(sal*12)-((sal*12)*4/100)
 -> from emp:
| fname | dob | mgr | (comm*12)+((comm*12)*10/100) | (sal*12)-((sal*12)*4/100) |
```

```
| RAHUL | 1991-02-19 | 1702 |
                                                   1152000.000000 |
                                       NULL |
| SAMEER | 1995-04-20 | 2001 |
                                        NULL |
                                                    1036800.000000 |
| JAHNAVI | 1996-04-11 | 1702 |
                                    13200.000000 |
                                                        5184000.000000 |
| SHIVANI | 1998-11-07 | 2201 |
                                       NULL |
                                                   5184000.000000 |
| ABHIJIT | 1997-12-25 | 1702 |
                                       NULL |
                                                   576000.000000 |
| KARAN | 1997-12-26 | 1701 |
                                       NULL |
                                                    518400.000000 |
| MURALI | 1998-06-08 | 2201 |
                                    13200.000000 |
                                                        518400.000000 |
| DHARANI | 1998-11-10 | 2001 |
                                    39600.000000 |
                                                        345600.000000 |
| RASHMI | 1995-10-03 | 1701 |
                                    39600.000000 |
                                                        518400.000000 |
| FARIYA | 1999-01-03 | 2001 |
                                   47520.000000 |
                                                       368640.000000 |
| PRIYA | 1998-03-20 | 2001 |
                                   47520.000000 |
                                                       368640.000000 |
| AMAN | 1998-08-15 | 1701 |
                                       NULL |
                                                    460800.000000 |
| KIRAN | 1999-09-21 | NULL |
                                   47520.000000 |
                                                       345600.000000 |
+-----+
13 rows in set (0.00 sec)
```

Sal with 5% hike,comm with 10% deduction,annual sal with 15% hike,annual comm with 15% deduction???????????

```
select fname,job,sal+(sal*5/100),comm-
(comm*10/100),(sal*12)+((sal*12)*15/100),(comm*12)-((comm*12)*20/100)
  -> from emp;
| fname | job | sal+(sal*5/100) | comm-(comm*10/100) | (sal*12)+((sal*12)*15/100) |
(comm*12)-((comm*12)*20/100) |
| RAHUL | MANAGER | 105000.000000 |
                                              NULL |
                                                          1380000.000000 |
NULL |
| SAMEER | MANAGER | 94500.000000 |
                                              NULL |
                                                          1242000.000000 |
NULL |
| JAHNAVI | DISPATCHER | 472500.000000 |
                                            900.000000 |
                                                              6210000.000000 l
9600.000000 |
| SHIVANI | TESTER | 472500.000000 |
                                            NULL |
                                                        6210000.000000 |
NULL |
| ABHIJIT | DISPATCHER | 52500.000000 |
                                             NULL |
                                                          690000.000000 I
NULL |
| KARAN | SALESMAN | 47250.000000 |
                                             NULL |
                                                          621000.000000 |
NULL |
| MURALI | DISPATCHER | 47250.000000 |
                                           900.000000 |
                                                              621000.000000 |
9600.000000 |
| DHARANI | DEVELOPER | 31500.000000 |
                                           2700.000000 |
                                                               414000.000000 |
28800.000000 |
| RASHMI | SALESMAN | 47250.000000 |
                                          2700.000000 |
                                                              621000.000000 |
28800.000000 |
| FARIYA | DEVELOPER | 33600.000000 |
                                          3240.000000 |
                                                             441600.000000 |
34560.000000 |
| PRIYA | ACCOUNTANT | 33600.000000 |
                                           3240.000000 |
                                                              441600.000000 |
34560.000000 |
```

AMAN   SALESMAN   42000.000000   NULL	NULL	552000.000000
KIRAN   ACCOUNTANT   31500.000000   34560.000000	·	·
+	+	+
13 rows in set (0.00 sec)		
ALIASING		
SALARY with 5% hike, commITION with 10% deduction, annual salARY with 15% hike,		
Annual_commITION with 20 % deduction???????	??????	
select fname,job,sal+(sal*5/100) "SALARY",comi "COMMISION",(sal*12)+((sal*12)*15/100) "ANN ((comm*12)*20/100) ANNUAL_COMMISION FROM EMP;	the state of the s	
+++	ANNUAL SALAF	RY   ANNUAL_COMMISION
RAHUL   MANAGER   105000.000000	NULL   1380000.0 NULL   1242000.0	000000   NULL   000000   NULL
SHIVANI   TESTER   472500.000000   NU   ABHIJIT   DISPATCHER   52500.000000   N   KARAN   SALESMAN   47250.000000   N	ILL   6210000.000 IULL   690000.00 IULL   621000.00	00000   NULL   00000   NULL
DHARANI   DEVELOPER   31500.000000   270 28800.000000     RASHMI   SALESMAN   47250.000000   2700	•	·
28800.000000     FARIYA   DEVELOPER   33600.000000   3240	•	·
34560.000000     PRIYA   ACCOUNTANT   33600.000000   324 34560.000000	0.000000   4416	00.000000
AMAN   SALESMAN   42000.000000   N   KIRAN   ACCOUNTANT   31500.000000   324   34560.000000	0.000000   4140	00.000000
13 rows in set (0.00 sec)	<del>-</del>	<sub>T</sub>

FIRST NAME, LAST NAME, & ANNUAL SALARY FROM EMP?????????? SELECT FNAME "FIRST NAME", Lname "LAST NAME", SAL\*12 "ANNUAL SALARY" FROM EMP;

+----+

```
| FIRST NAME | LAST NAME | ANNUAL SALARY |
+----+
| RAHUL | MUKARJEE | 1200000.00 |
| SAMEER | KHAN | 1080000.00 |
| JAHNAVI | NAIK | 5400000.00 |
| ABHIJIT | GOWDA | 600000.00 |
| MURALI | KRISHNAN | 540000.00 |
| RASHMI | GONDA | 540000.00 |
| FARIYA | TAJ | 384000.00 |
| PRIYA | SHETTY | 384000.00 |
| AMAN | RAI | 480000.00 |
| KIRAN | RAJ | 360000.00 |
+----+
```

13 rows in set (0.00 sec)

### "DISTINCT"

DIFFERENT JOB ROLE PRESENT IN EMP TABLE??????????

```
SELECT DISTINCT JOB
 FROM EMP;
+----+
| JOB |
+----+
| MANAGER |
| DISPATCHER |
| TESTER |
| SALESMAN |
| DEVELOPER |
| ACCOUNTANT |
+----+
6 rows in set (0.00 sec)
```

UNIQUE COMBINATION OF SAL AND DNO FROM EMP

```
SELECT DISTINCT SAL, DNO
-> FROM EMP:
+----+
| SAL | DNO |
+----+
| 100000.00 | 111 |
| 90000.00 | 110 |
| 450000.00 | 110 |
| 450000.00 | 113 |
| 50000.00 | 110 |
```

```
| 45000.00 | 111 |
| 45000.00 | 110 |
| 30000.00 | 113 |
| 32000.00 | 113 |
| 32000.00 | 112 |
| 40000.00 | 111 |
| 30000.00 | 115 |
+----+
12 rows in set (0.00 sec)
"SELECTION"
fmane ="rashmi"
select* from emp
-> where fname="rashmi";
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
+----+
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 | 45000.00
| 3000.00 | 111 | NULL |
1 row in set (0.00 sec)
Fame firstname, Iname lastname job where job="salesmae"??????
select fname "first name", Iname "last name", job
 -> From emp
-> where job="salesman";
+----+
| first name | last name | job
+----+
| KARAN | BHAT | SALESMAN |
| RASHMI | GONDA | SALESMAN |
| AMAN | RAI | SALESMAN |
+----+
3 rows in set (0.00 sec)
WOTD EMP WHO ARE GETTING SAL MORE THAN 45000
select * from emp
-> where sal>45000;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
```

45000.00 | 1000.00 | 110 | NULL |

```
| 2101 | RASHMI | GONDA | 1995-10-03 | f | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
+-----
3 rows in set (0.00 sec)
FAME, LAME, SAL, DOB FROM EMP IF THE EMP BORN AFTER THE YEAR 1993????????
select fname "first name", Iname "last name", sal "salary", DOB "DATEOF BIRTH"
 -> FROM EMP
 -> WHERE DOB>'1993-12-12':
+-----+
| first name | last name | salary | DATEOF BIRTH |
+----+
| SAMEER | KHAN | 90000.00 | 1995-04-20 |
| JAHNAVI | NAIK | 450000.00 | 1996-04-11 |
| ABHIJIT | GOWDA | 50000.00 | 1997-12-25 |
| MURALI | KRISHNAN | 45000.00 | 1998-06-08 |
| DHARANI | PATIL | 30000.00 | 1998-11-10 |
| RASHMI | GONDA | 45000.00 | 1995-10-03 |
| FARIYA | TAJ | 32000.00 | 1999-01-03 |
| PRIYA | SHETTY | 32000.00 | 1998-03-20 |
| KIRAN | RAJ | 30000.00 | 1999-09-21 |
+----+
12 rows in set (0.00 sec)
SELECT FNAME, JOB, DOB
 -> FROM EMP
-> WHERE doj<'2019-01-01'; 0r' 2018-12-31';
+----+
| FNAME | JOB | DOB
+----+
| RAHUL | MANAGER | 1991-02-19 |
| SAMEER | MANAGER | 1995-04-20 |
+----+
2 rows in set (0.00 sec)
The emp hierd after the month mar 2020??????
select * from emp
-> where doj>'2020-03-31';
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
```

```
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
6 rows in set (0.00 sec)
Annual sal is more than 500000????????????/
select sal "annual salary" from emp
-> where sal*12>500000;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
8 rows in set (0.00 sec)
Logical OPERATORS
Emp who are working as salesman or manager
select * from emp
-> where job ='salesman' or job='manager';
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
```

```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
2104 AMAN RAI | 1998-08-15 m | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
5 rows in set (0.00 sec)
If the emp borm during the year 1995
SELECT fname, Iname, sal, dob
 -> FROM emp
 -> WHERE dob >= '1995-01-01' AND dob <= '1995-12-31';
+----+
| fname | lname | sal | dob
+----+
| SAMEER | KHAN | 90000.00 | 1995-04-20 |
| RASHMI | GONDA | 45000.00 | 1995-10-03 |
+----+
2 rows in set (0.00 sec)
salesman Or developer dno =111
select * from emp
-> where job='salesman' or job='developer' and (dno=111);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 | 45000.00
| NULL | 111 | 506 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 | 45000.00
| 3000.00 | 111 | NULL |
2104 AMAN RAI 1998-08-15 M SALESMAN 1701 2021-12-26 40000.00
NULL | 111 | NULL |
3 rows in set (0.00 sec)
Job salesman, manager, developrr, dispacher sal more than 45000
select * from emp
 -> where (job='salesman' or job='developer' or job='manager'or job ='dispatcher') and
sal> 45000;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
```

+++
<del>+</del>
1701   RAHUL   MUKARJEE   1991-02-19   m   MANAGER   1702   2017-04-17
100000.00   NULL   111   NULL
1702   SAMEER   KHAN   1995-04-20   m   MANAGER   2001   2017-07-07
90000.00   NULL   110   NULL
1801   JAHNAVI   NAIK   1996-04-11   f   DISPATCHER   1702   2020-02-15
450000.00   1000.00   110   NULL
1902   ABHIJIT   GOWDA   1997-12-25   m   DISPATCHER   1702   2019-02-28
50000.00   NULL   110   505
++
<del>+</del>
4 rows in set (0.00 sec)

## "IN"--IT WORKS FOR OR CONITION

Job salesman, manager, developrr, dispacher sal more than 45000

```
select * from emp
-> where job IN ('SALESMAN','DEVELOPER','MANAGER','DISPATCHER') AND SAL>45000;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
4 rows in set (0.00 sec)
EMP IF THE EMP ARE WORKING IN 110,111 OR,112 AND SAL > 30000 AND WORKIN AS
SALESMAN OR MANAGER?
SELECT * FROM EMP
 -> WHERE DNO IN (110,111,112) AND (SAL>30000) AND JOB IN('SALESMAN', 'MANAGER');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
```

```
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
5 rows in set (0.00 sec)
SELECT FNAME, LNAME, JOB, DOJ
 -> FROM EMP
 -> WHERE DOJ > '2017-12-31' AND JOB IN ('SALESMAN', 'MANAGER', 'DEVELOPER');
+----+
| FNAME | LNAME | JOB | DOJ
+----+
| KARAN | BHAT | SALESMAN | 2019-12-26 |
| DHARANI | PATIL | DEVELOPER | 2021-06-20 |
| RASHMI | GONDA | SALESMAN | 2021-01-02 |
| FARIYA | TAJ | DEVELOPER | 2021-03-01 |
| AMAN | RAI | SALESMAN | 2021-12-26 |
+----+
5 rows in set (0.00 sec)
SELECT * FROM EMP
 -> WHERE JOB != 'SALESMAN' AND JOB != 'MANAGER' AND JOB != 'DEVELOPER';
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
6 rows in set (0.00 sec)
```

NOT

```
SELECT * FROM EMP
-> WHERE JOB != 'SALESMAN' AND JOB != 'MANAGER' AND JOB != 'DEVELOPER';
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
32000.00 | 3600.00 | 112 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
6 rows in set (0.00 sec)
NOT IN
EMP IF THE EMP ARE NOT WORKING AS SALESMAN, MANAGER, DEVELOPER?????????
SELECT * FROM EMP
-> WHERE JOB NOT IN ("SALESMAN", "MANAGER", "DEVELOPER");
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
6 rows in set (0.00 sec)
```

```
name, dno sal if the emp not in 110,112 sa
 00000?
select fname, dno, sal from emp
 -> where dno not in(110,112) and (sal < 100000);
+----+
| fname | dno | sal |
+----+
| KARAN | 111 | 45000.00 |
| DHARANI | 113 | 30000.00 |
| RASHMI | 111 | 45000.00 |
| FARIYA | 113 | 32000.00 |
| AMAN | 111 | 40000.00 |
| KIRAN | 115 | 30000.00 |
+----+
6 rows in set (0.00 sec)
select * from emp
 where (dob>='1998-01-01' and dob<='1998-12-31') and job not in
("manager", "salesman") and (doj>="2020-01-01" and doj<='2020-12-31') and gender !='f';
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
1 row in set (0.01 sec)
Select * from emp
Where Sal>= 35000 and sal<=50000;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
```

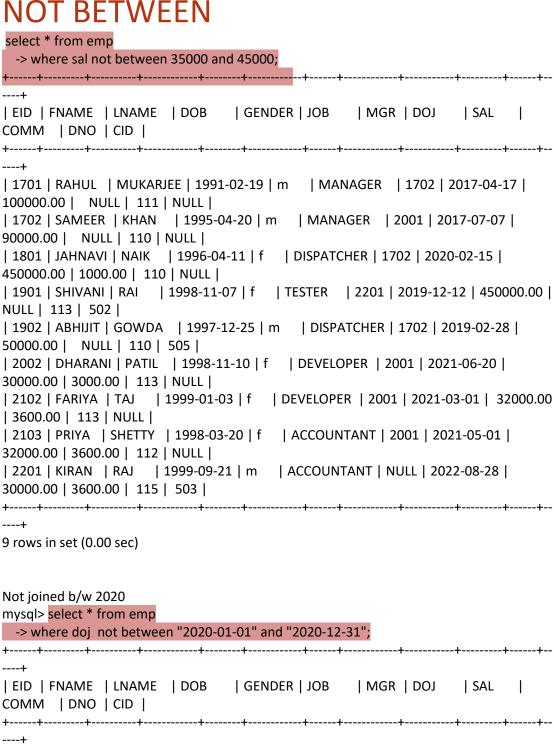
2104   AMAN   RAI   1998-08-15   m 40000.00   NULL   111   NULL	SALESMAN   1701   2021-12-26
+++++	++++++
+	
5 rows in set (0.00 sec)	

### between

```
mysql> Select * from emp
-> where Sal between 35000 and 50000;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
5 rows in set (0.00 sec)
dob born in the in 1993?????????
Select * from emp
 -> where dob between'1993-01-01'and '1993-12-31';
Empty set (0.00 sec)
```

```
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00 |
NULL | 111 | NULL |
4 rows in set (0.00 sec)
where sal between 35000+0.01 and 100000+o.ol and job in
("salesman", "developer", "manager");
```

# **NOT BETWEEN**



```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
11 rows in set (0.00 sec)
Getting some comm?
select * from emp
-> where comm is not null;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
```

```
7 rows in set (0.00 sec)
EMP WHO IS ACTING AS CUSTOMER????????????????
select * from emp
 -> WHERE CID IS NOT NULL;
   | EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
4 rows in set (0.00 sec)
EMP IF THEY HAVE ACTING AS A REPORTING MANAGER???????/
mysql> select * from emp
-> WHERE MGR IS NOT NULL;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
```

```
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
12 rows in set (0.00 sec)
EMP WHO ARE GETTING SAL IN THE RANGE OF 40000 TO 100000 AND IN THE YESR 2019
AND IN THE DATE 26?
SELECT *
FROM emp
WHERE SAL BETWEEN 40000 AND 100000
AND EXTRACT(YEAR FROM DOJ) = 2019
AND EXTRACT(DAY FROM DOJ) = 26;
WORKING AS SALESMAN, DEVELOPER, DISPATCHER, AND BUT NOT THE DEPT 110,112 AND
GETTING SAL 30000 AND 50000 AND DOB NOT B/W 1995
SELECT *
 -> FROM emp
 -> WHERE JOB IN ("SALESMAN", "DEVELOPER", "DISPATCHER")
 -> AND DNO NOT IN (110, 112)
 -> AND SAL BETWEEN 30000 AND 50000
 -> AND DOB NOT BETWEEN '1995-01-01' AND '1995-12-31'
-> AND MGR IS NOT NULL;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 | 45000.00
| NULL | 111 | 506 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 | 30000.00
| 3000.00 | 113 | NULL |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
2104 AMAN RAI 1998-08-15 M SALESMAN 1701 2021-12-26 40000.00
NULL | 111 | NULL |
4 rows in set (0.01 sec)
like
Fame start with s???????/
mysql> SELECT FNAME
 -> FROM EMP
-> WHERE FNAME LIKE "S%";
+----+
```

```
| FNAME |
+----+
| SAMEER |
| SHIVANI |
+----+
2 rows in set (0.00 sec)
LNAME ENDING WITH 1??????????/
select * from emp
-> where Iname LIKE "%I";
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
2104 AMAN RAI 1998-08-15 M SALESMAN 1701 2021-12-26 40000.00
NULL | 111 | NULL |
+----+
2 rows in set (0.00 sec)
FNAME ATLEAST 2A AND SAL > 25000?
mysql> SELECT FNAME, LNAME, JOB, SAL
 -> FROM EMP
-> WHERE FNAME LIKE "%A%A%" AND SAL>25000 :
+----+
| FNAME | LNAME | JOB
                  | SAL
+----+
| JAHNAVI | NAIK | DISPATCHER | 450000.00 |
| KARAN | BHAT | SALESMAN | 45000.00 |
| DHARANI | PATIL | DEVELOPER | 30000.00 |
| FARIYA | TAJ | DEVELOPER | 32000.00 |
| AMAN | RAI | SALESMAN | 40000.00 |
+----+
5 rows in set (0.00 sec)
Job starting with man
select fname, Iname, job
 -> from emp
-> where job like "%man%";
+----+
| fname | Iname | job |
+----+
| RAHUL | MUKARJEE | MANAGER |
| SAMEER | KHAN | MANAGER |
| KARAN | BHAT | SALESMAN |
| RASHMI | GONDA | SALESMAN |
| AMAN | RAI | SALESMAN |
+----+
5 rows in set (0.00 sec)
```

```
Fnmae start with s or a
select * from emp
-> where fname like "s%" or fname like "a%";
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
4 rows in set (0.00 sec)
Doj in the year 2019????/
select * from emp
-> where doj like "2019%"
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
3 rows in set (0.00 sec)
Dorn on jan,feb,mar????????????????
select fname, Iname, dob
 -> from emp
 -> where dob like "%-01-%" or dob like "%-02-%" or dob like "%-03-%";
+----+
| fname | Iname | dob
+----+
| RAHUL | MUKARJEE | 1991-02-19 |
| FARIYA | TAJ | 1999-01-03 |
| PRIYA | SHETTY | 1998-03-20 |
+----+
3 rows in set (0.00 sec)
Who were date 12 or 01?
select * from emp
 -> where doj like "%-12" or doj like "%-01";
```

```
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
3 rows in set (0.00 sec)
Wqtd fname,job,sal*12 if sal*12 end with 0?/
select fname,job,sal*12
 -> from emp
 -> where sal*12 like "%0";
+----+
| fname | job | sal*12 |
+----+
| RAHUL | MANAGER | 1200000.00 |
| SAMEER | MANAGER | 1080000.00 |
| JAHNAVI | DISPATCHER | 5400000.00 |
| SHIVANI | TESTER | 5400000.00 |
| ABHIJIT | DISPATCHER | 600000.00 |
| KARAN | SALESMAN | 540000.00 |
| MURALI | DISPATCHER | 540000.00 |
| DHARANI | DEVELOPER | 360000.00 |
| RASHMI | SALESMAN | 540000.00 |
| FARIYA | DEVELOPER | 384000.00 |
| PRIYA | ACCOUNTANT | 384000.00 |
| AMAN | SALESMAN | 480000.00 |
| KIRAN | ACCOUNTANT | 360000.00 |
+----+
13 rows in set (0.00 sec)
Not like
Whose fname not start with s?????????/
select fname from emp
-> where fname not like "s%";
+----+
| fname |
+----+
| RAHUL |
| JAHNAVI |
| ABHIJIT |
| KARAN |
```

```
| MURALI |
| DHARANI |
| RASHMI |
| FARIYA |
| PRIYA |
AMAN |
| KIRAN |
+----+
11 rows in set (0.00 sec)
whre not born during 1995????????
select * from emp
-> where dob not like "1995%";
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
----+
11 rows in set (0.00 sec)
Fame not starting with s and d?
select * from emp
 -> where fname not like "s%" and fname not like "d%";
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
```

```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | | 1999-09-21 | m | | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
10 rows in set (0.00 sec)
select * from emp
 -> where fname like "%e__" and Iname like "%n" and job in ("salesman", "manager") and
gender!="f";
+-----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM |
DNO | CID |
+----+
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 | 90000.00
| NULL | 110 | NULL |
+----+
1 row in set (0.00 sec)
4 char is n and some comm
select * from emp
-> where fname like " n%"and comm is not null;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
1 row in set (0.00 sec)
```

```
-> where Iname not like "%a" and Iname not like "%e" and Iname not like "%i" and Iname
not like "%o" and Iname not like "%u";
| fname |
+----+
| SAMEER |
| JAHNAVI |
| KARAN |
| MURALI |
| DHARANI |
| FARIYA |
| PRIYA |
| KIRAN |
+----+
8 rows in set (0.00 sec)
С
SELECT * FROM pentagon
 -> where name like '%\%%';
+----+
| id | name |
+----+
| 1 | RAK%SHITH |
| 3 | PA%VA%N |
+----+
2 rows in set (0.00 sec)
2% in pentagon
SELECT * FROM pentagon
 -> where name like '%\%%\%%';
+----+
|id | name |
+----+
| 3 | PA%VA%N |
+----+
1 row in set (0.00 sec)
3rd char is -?????????
SELECT * FROM pentagon
 -> where name like '\%%';
+----+
|id | name |
+----+
| 3 | PA%VA%N |
+----+
1 row in set (0.00 sec)
mysql>min sal and max(sal)???????????
select max(sal),min(sal)
 -> from emp;
```

select fname from emp

+----+

```
| max(sal) | min(sal) |
+-----+
| 450000.00 | 30000.00 |
+-----+
1 row in set (0.00 sec)
```

### AGGREGATE FUNCTION

```
Total sal given to all salesman???????/
select sum(sal)
  from emp
 where job="salesman";
+----+
| sum(sal) |
+----+
| 130000.00 |
+----+
1 row in set (0.00 sec)
Avg, sum, min, max of sal where fname start from k or r???????/
select avg(sal),sum(sal),max(sal),min(sal)
 from emp
  where fname like "k%" or fname like "r%":
+----+
| avg(sal) | sum(sal) | max(sal) |
+----+
| 55000.000000 | 220000.00 | 100000.00 |
+----+
1 row in set (0.00 sec)
No of emp working as salesman or manager???????/
select count(*)
 -> from emp
 -> where job in ("salesman", "manager");
| count(*) |
+----+
   5 |
+----+
1 row in set (0.00 sec)
NO OF EMP WORKIN IN DNO 111 OR 113 AND FNMAE IS START R NOT AS FEMAN???/
SELECT COUNT(*)
 -> FROM EMP
 -> WHERE DNO IN( 111,113) AND FNAME LIKE "R%" AND GENDER != "F";
+----+
| COUNT(*) |
+----+
| 1|
+----+
```

```
1 row in set (0.00 sec)
SL >50000 AND BORN ON 07 AND NOT COMM?
SELECT COUNT(*)
 -> FROM EMP
-> WHERE SAL>50000 AND DOB LIKE "%-07" AND COMM IS NULL;
| COUNT(*) |
+----+
    1 |
+----+
1 row in set (0.00 sec)
WRITE A QUERY OF DIFFERENT JOBROLE ORESENT IN EMP TABLE?
SELECT DISTINCT JOB
-> FROM EMP;
+----+
| JOB |
+----+
| MANAGER |
| DISPATCHER |
| TESTER |
| SALESMAN |
| DEVELOPER |
| ACCOUNTANT |
+----+
6 rows in set (0.00 sec)
mysql> SELECT COUNT(DISTINCT JOB)
-> FROM EMP;
+----+
| COUNT(DISTINCT JOB) |
+----+
| 6|
1 row in set (0.00 sec)
GROUP BY
Wqtd no of emps working in each dept????
select count(*)
 -> from emp
-> group by dno=110;
+----+
| count(*) |
+----+
    9 |
```

4 |

2 rows in set (0.00 sec)

```
mysql> select count(*),dno
 -> from emp
 -> group by dno;
+----+
| count(*) | dno |
+----+
    4 | 111 |
    4 | 110 |
    3 | 113 |
    1 | 112 |
    1 | 115 |
+----+
TOTAL SAL SPENT BY THE COMPANY IN EAVH JOB ROLE SAL, MAN, DEV?
SELECT SUM(SAL), JOB
 -> FROM EMP
 -> WHERE JOB IN ('MANAGER', 'SALESMAN', 'DEVELOPER')
 -> GROUP BY JOB;
+----+
| SUM(SAL) | JOB
+----+
| 190000.00 | MANAGER |
| 130000.00 | SALESMAN |
| 62000.00 | DEVELOPER |
+----+
3 rows in set (0.00 sec)
```

# **HAVING CLAUSE**

Wqt max sal given to each each dept if the emp is getting sal more than 2500 and max sal more the 50000?

```
select max(sal),dno
 -> from emp
 -> where sal>25000
 -> group by dno
 -> having max(sal)>50000;
+----+
| max(sal) | dno |
+----+
| 100000.00 | 111 |
| 450000.00 | 110 |
| 450000.00 | 113 |
+----+
3 rows in set (0.00 sec)
select avg(sal),sum(sal)
 -> from emp
 -> group by dno
```

```
-> having avg(sal)>40000;
+----+
| avg(sal) | sum(sal) |
+----+
| 57500.000000 | 230000.00 |
| 158750.000000 | 635000.00 |
| 170666.666667 | 512000.00 |
+----+
3 rows in set (0.01 sec)
Max sal, min sal, , no of emp woring in each dept if dept contains at least 3 vemp working in it
and sal > 32000
select max(sal),min(sal),count(*),dno
 -> from emp
 -> where sal>32000
 -> group by dno
 -> having count(*)>=3;
+----+
| max(sal) | min(sal) | count(*) |
+----+
| 100000.00 | 40000.00 |
| 450000.00 | 45000.00 |
                       4 |
+----+
2 rows in set (0.00 sec)
Mix sal, min sal given to each dept if the dept has min sal >30000 and max sal <500000??????
select max(sal),min(sal),dno
 -> from emp
 -> group by dno
 -> having min(sal)>30000 and max(sal)<500000;
+----+
| max(sal) | min(sal) | dno |
+----+
| 100000.00 | 40000.00 | 111 |
| 450000.00 | 45000.00 | 110 |
| 32000.00 | 32000.00 | 112 |
+----+
3 rows in set (0.00 sec)
Wqtd number of emp who are getting same sal?????????
SELECT sal, COUNT(*) AS num_of_employees
FROM emp
GROUP BY sal
HAVING COUNT(*) > 1;
+----+
sal | num_of_employees |
+----+
| 450000.00 |
                 2 |
               3 |
| 45000.00 |
                2 |
30000.00
32000.00
                2 |
+----+
```

#### 4 rows in set (0.00 sec)

```
Wqtd no of emp having same gender and working in same dept?????????
select count(*),gender,dno
 -> from emp
 -> group by gender, dno
-> having count(*) >1;
+----+
| count(*) | gender | dno |
+----+
  3 | m | 111 |
    3 | m | 110 |
    3 | f | 113 |
+----+
3 rows in set (0.00 sec)
mysql>order by
select * from emp
-> order by sal desc;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
```

```
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
13 rows in set (0.00 sec)
mysql>
If the emp is workin as salesman, manager and arrange fnmae based on alpabetical
order?????????/
select fname, Iname, job
 -> from emp
 -> where job in ("manager", "salesman")
 -> order by fname asc;
+----+
| fname | Iname | job |
+----+
| AMAN | RAI | SALESMAN |
| KARAN | BHAT | SALESMAN |
| RAHUL | MUKARJEE | MANAGER |
| RASHMI | GONDA | SALESMAN |
| SAMEER | KHAN | MANAGER |
+----+
5 rows in set (0.00 sec)
No of empwho e
SELECT COUNT(*), sal, job
 -> FROM emp
 -> WHERE sal > 30000
 -> GROUP BY sal, job
 -> HAVING COUNT(*) > 1
 -> ORDER BY sal ASC;
+----+
| COUNT(*) | sal | job |
+----+
  2 | 45000.00 | SALESMAN |
+----+
1 row in set (0.00 sec)
mysgl>wgtd details of first 3 emp from emp table????????
select * from emp
-> limit 3;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
```

```
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
3 rows in set (0.00 sec)
1 recrd details?
select * from emp
-> limit 1;
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
+----+
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
1 row in set (0.00 sec)
2 recd from the emp tab;e?????/
SELECT * FROM emp
-> LIMIT 1 OFFSET 1;
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM |
DNO | CID |
+----+
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 | 90000.00
| NULL | 110 | NULL |
+----+
1 row in set (0.00 sec)
mysql>6 and 7
select * from emp
-> limit 2 offset 5:
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
2 rows in set (0.00 sec)
Last 5 record
select * from emp
-> order by eid desc
-> limit 5;
```

```
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
5 rows in set (0.00 sec)
limit 5 ofsset 8;
WQTD THIRD MAXIMUM SALARY FROM EMP TABLE.
=>
select distinct sal
 -> from emp
 -> order by sal desc
-> limit 1 offset 2;
+----+
l sal |
90000.00
+----+
1 row in set (0.00 sec)
WQTD 5TH MINIMUM SALARY FROM EMP TABLE?
SELECT DISTINCT SAL
FROM EMP
ORDER BY SAL ASC
LIMIT 1 OFFSET 4;
+----+
| SAL |
| 50000.00 |
+----+
1 row in set (0.00 sec)
mysql>
82.WQTD 4TH MAXIMUM SALARY.
```

```
SELECT DISTINCT SAL
FROM EMP
ORDER BY SAL DESC
LIMIT 1 OFFSET 3;
+----+
| SAL |
+----+
| 50000.00 |
+----+
1 row in set (0.00 sec)
SELECT CONCAT('MR/MISS',FNAME,' YOUR SALARY IS', SAL,'RS.')
FROM EMP;
CONCAT('MR/MISS',FNAME,' YOUR SALARY IS', SAL,'RS.') |
MR/MISS RAHUL YOUR SALARY IS 100000.00RS.
| MR/MISS SAMEER YOUR SALARY IS 90000.00RS.
MR/MISS JAHNAVI YOUR SALARY IS 450000.00RS.
| MR/MISS SHIVANI YOUR SALARY IS 450000.00RS.
| MR/MISS ABHIJIT YOUR SALARY IS 50000.00RS.
| MR/MISS KARAN YOUR SALARY IS 45000.00RS.
| MR/MISS MURALI YOUR SALARY IS 45000.00RS.
MR/MISS DHARANI YOUR SALARY IS 30000.00RS.
MR/MISS RASHMI YOUR SALARY IS 45000.00RS.
| MR/MISS FARIYA YOUR SALARY IS 32000.00RS.
MR/MISS PRIYA YOUR SALARY IS 32000.00RS.
MR/MISS AMAN YOUR SALARY IS 40000.00RS.
MR/MISS KIRAN YOUR SALARY IS 30000.00RS.
13 rows in set (0.00 sec)
83.WQTD FNAME,LNAME TOGETHER AS FULL NAME BASED ON BELOW FORMAT.
FULL NAME: KICCHA SUDEEP
SELECT CONCAT('KICCHA SUDEEP');
SELECT CONCAT(FNAME, ' ', LNAME) AS 'FULL NAME'
FROM EMP;
84.WQTD DETAILS OF THE EMPS WHOSE FNAME STARTS WITH K??
=>
SELECT *
FROM EMP
WHERE SUBSTR(FNAME,1,1)='K';
+----+-----
                             --+------+-----+-----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
```

=>

```
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 | 45000.00
| NULL | 111 | 506 |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 | 30000.00
| 3600.00 | 115 | 503 |
85.WQTD FNAME OF THE EMPS WHOSE FNAME ENDS WITH R?
SELECT FNAME
FROM EMP
WHERE SUBSTR(FNAME,-1,1)='R';
+----+
| FNAME |
+----+
| SAMEER |
+----+
86.WQTD DETAILS OF THE EMPS WHOSE FNAME STARTS WITH VOWELS?
=>
SELECT *
FROM EMP
WHERE SUBSTR(FNAME,1,1) IN ('A','E','I','O','U');
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
2 rows in set (0.00 sec)
87.WOTD DETAILS OF THE EMPS WHOSE LNAME IS NOT ENDING WITH VOWEL.
=>
SELECT *
FROM EMP
WHERE SUBSTR(LNAME,-1,1)NOT IN('A','E','I','O','U');
SELECT *
-> FROM EMP
-> WHERE SUBSTR(LNAME,-1,1)NOT IN('A','E','I','O','U');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
```

```
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
8 rows in set (0.00 sec)
88.wqtd DETAILS OF EMP WHO APON IN THE YEAR 1999?
=>
SELECT *
FROM EMP
WHERE SUBSTR(DOB,1,4)='1999';
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
I DNO I CID I
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 | 30000.00
| 3600.00 | 115 | 503 |
89.WQTD FNAME, LNAME, DOJ IF THE EMP JOIN IN THE MONTH OF APRIL, MAY, JUNE OR
JULY?
SELECT FNAME, LNAME, DOJ
FROM EMP
WHERE SUBSTR(DOJ,6,2) IN (04,05,06,07);
+----+
| FNAME | LNAME | DOJ
+----+
| RAHUL | MUKARJEE | 2017-04-17 |
| SAMEER | KHAN | 2017-07-07 |
| DHARANI | PATIL | 2021-06-20 |
| PRIYA | SHETTY | 2021-05-01 |
+----+
```

| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |

```
4 rows in set (0.00 sec)
90.WQTD FNAME, JOB IF THE JOB IS STARTING WITH STRING SAL OR MANA?
SELECT FNAME, JOB
FROM EMP
WHERE SUBSTR(JOB,1,3)='SAL' OR SUBSTR(JOB,1,4)='MANA';
+----+
| FNAME | JOB |
+----+
| RAHUL | MANAGER |
| SAMEER | MANAGER |
| KARAN | SALESMAN |
| RASHMI | SALESMAN |
| AMAN | SALESMAN |
+----+
5 rows in set (0.00 sec)
91WQTD DETAILS F EMPS WHOS REVERSED FNAME MATCHES WITH THE STRING NAMA?
=>
SELECT *
FROM EMP
WHERE REVERSE(FNAME)='NAMA':
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM |
DNO | CID |
+----+
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00 |
NULL | 111 | NULL |
92.WQT EXTARCT INITAILS FROM FULL NAME IN BELOW FORMAT
FULL NAME: SHARUKH KHAN: S.K.
SELECT CONCAT(SUBSTR(FNAME,1,1),'.',SUBSTR(LNAME,1,1),'.') AS 'FULL NAME'
FROM EMP;
+----+
| FULL NAME |
+----+
| R.M. |
| S.K. |
| J.N. |
| S.R. |
| A.G. |
| K.B. |
| M.K. |
| D.P. |
```

| R.G. |

```
| F.T.
| P.S. |
| A.R.
| K.R. |
+----+
13 rows in set (0.00 sec)
93.WQTD FIRST HALF OF FNAME FROM EMP TABLE?
=>
SELECT SUBSTR(FNAME,1,LENGTH(FNAME)/2)
FROM EMP;
+----+
| SUBSTR(FNAME,1,LENGTH(FNAME)/2) |
+----+
| RAH
| SAM
| JAHN
| SHIV
| ABHI
| KAR
| MUR
| DHAR
| RAS
| FAR
| PRI
| AM
KIR
13 rows in set (0.00 sec)
94.WQTD SECOND HALF OF FNAME FROM EMP TABLE?
SELECT SUBSTR(FNAME,1+LENGTH(FNAME)/2)
FROM EMP;
+----+
| SUBSTR(FNAME,1+LENGTH(FNAME)/2) |
| UL
               | EER
                - 1
| AVI
| ANI
| JIT
| AN
| ALI
| ANI
| HMI
IYA
| YA
| AN
```

AN			
13 rows in set (0.00 sec)			
mysql>			
95.WQTD FIRST HALF OF FNA FORMAT BASED ON SAMPLE SAMPLE O/P; RAHUL : rahLU	OP;	SE AND SECOND HA	ALF OF FNAME IN REVERSE
=> SELECT CONCAT(LOWER(SUBSTR(FN H(FNAME)/2))) FROM EMP;	IAME,1,LENGTH(FN.	AME)/2)),REVERSE	(SUBSTR(FNAME,1+LENGT
+    CONCAT(LOWER(SUBSTR(FN H(FNAME)/2)))			·
rahLU	WORD ,THE PASSW	           	·+
=> SELECT FNAME,CONCAT(SUE PASSWORD FROM EMP;   FNAME   PASSWORD   ++   RAHUL   RAH5701     SAMEER   SAM6702     JAHNAVI   JAH7801	3STR(FNAME,1,3),LE	ENGTH(FNAME),SL	JBSTR(EID,-3)) AS

```
| ABHIJIT | ABH7902 |
| KARAN | KAR5903 |
| MURALI | MUR6001 |
| DHARANI | DHA7002 |
| RASHMI | RAS6101 |
| FARIYA | FAR6102 |
| PRIYA | PRI5103 |
| AMAN | AMA4104 |
| KIRAN | KIR5201 |
+----+
97.WQTD FNAME AND PASSWORD FOR ABHIJIT AND PRIYA THE PASSWORD CONTAIN
BELOW CONDITION
1.SECOND HALF OF FNAME'
2.LENTH OF LNAME
3.REVESE LAST 3 DIGITS OF MGR
4. LAST 2 DIGITS OF EID
=>
+----+
| FNAME | PASSWORD |
+----+
| RAHUL | UL820701 |
| SAMEER | EER410002 |
| SHIVANI | ANI310201 |
| ABHIJIT | JIT520702 |
| KARAN | AN410703 |
| MURALI | ALI810201 |
| DHARANI | ANI510002 |
| RASHMI | HMI510701 |
| FARIYA | IYA310002 |
| PRIYA | YA610003 |
| AMAN | AN310704 |
| KIRAN | NULL
+----+
SELECT
FNAME,CONCAT(SUBSTR(FNAME,1+LENGTH(FNAME)/2),LENGTH(LNAME),REVERSE(SUBSTR(
MGR,-3)),SUBSTR(EID,-2)) AS PASSWORD
FROM EMP
WHERE FNAME IN ('ABHIJIT', 'PRIYA');
+----+
| FNAME | PASSWORD |
+----+
| ABHIJIT | JIT520702 |
| PRIYA | YA610003 |
+----+
Wqtd replace A and I WITH [A] AND [I] IN FNAME???
select REPLACE(replace(fname,'A','[A]'),'I','[I]')
```

| SHIVANI | SHI7901 |

```
-> FROM EMP;
| REPLACE(replace(fname, 'A', '[A]'), 'I', '[I]') |
| R[A]HUL
| S[A]MEER
| J[A]HN[A]V[I]
| SH[I]V[A]N[I]
| [A]BH[I]J[I]T
| K[A]R[A]N
| MUR[A]L[I]
| DH[A]R[A]N[I]
| R[A]SHM[I]
| F[A]R[I]Y[A]
| PR[I]Y[A]
| [A]M[A]N
| K[I]R[A]N
13 rows in set (0.00 sec)
WQTD THE COUNT OF LETTER A IN MALAYALAM????????/
mysql>
SELECT LENGTH('MALAYALAM') - LENGTH(REPLACE('MALAYALAM', 'A', ")) AS A_count;
+----+
| A count |
+----+
| 4|
FNAME CONTAINS EXACTLUY 1 A?????????????
SELECT FNAME FROM EMP
 -> WHERE LENGTH(FNAME)-LENGTH(REPLACE(FNAME, 'A', "))=1;
| FNAME |
+----+
| RAHUL |
| SAMEER |
| SHIVANI |
| ABHIJIT |
| MURALI |
| RASHMI |
| PRIYA |
| KIRAN |
+----+
8 rows in set (0.00 sec)
```

MOD

WQTD DETAILS OF EMP THOSE WHO HAVE EVEN EID?????

```
SELECT * FROM EMP
WHERE MOD(EID,2)=0;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 | 30000.00
| 3000.00 | 113 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
5 rows in set (0.00 sec)
mysql>
```

#### **ROUND**

| ceil(4.1) | +----+

```
select round(123.45);
+----+
| round(123.45) |
+----+
   123 |
+----+
1 row in set (0.00 sec)
mysql> select round(123.4567,2);
+----+
| round(123.4567,2) |
+----+
    123.46 |
+----+
1 row in set (0.00 sec)
mysql> select round(123.4567345,4);
+----+
| round(123.4567345,4) |
+----+
      123.4567 |
+----+
1 row in set (0.00 sec)
Wqt avg sal obtained in each dept & dound of 2 decimal point
select round(avg(sal),2),dno
 -> from emp
 -> group by dno;
+----+
| round(avg(sal),2) | dno |
+----+
     57500.00 | 111 |
    158750.00 | 110 |
    170666.67 | 113 |
     32000.00 | 112 |
     30000.00 | 115 |
   ----+
5 rows in set (0.00 sec)
CEIL()
select ceil(4.1);
+----+
```

```
| 5|
+----+
1 row in set (0.00 sec)
mysql> select ceil(-4.1);
+----+
| ceil(-4.1) |
+----+
   -4 |
+----+
1 row in set (0.00 sec)
FLOOR
SELECT FLOOR(67.6);
+----+
| FLOOR(67.6) |
+----+
| 67 |
+----+
1 row in set (0.00 sec)
mysql> SELECT FLOOR(-67.6);
+----+
| FLOOR(-67.6) |
+----+
| -68 |
+----+
1 row in set (0.00 sec)
SELECT TRUNCATE(1234.567,2);
+----+
| TRUNCATE(1234.567,2) |
+----+
| 1234.56 |
+----+
1 row in set (0.00 sec)
mysql> SELECT POW(8,2);
+----+
| POW(8,2) |
+----+
| 64 |
+----+
SQRT
1 row in set (0.00 sec)
SELECT SQRT(64);
+----+
| SQRT(64) |
+----+
    8 |
+----+
```

```
1 row in set (0.00 sec)
mysql> SELECT SQRT(-64);
+----+
| SQRT(-64) |
+----+
I NULL I
+----+
1 row in set (0.00 sec)
mysgl>CURDATE
SELECT CURDATE();
+----+
| CURDATE() |
+----+
| 2025-05-06 |
+----+
1 row in set (0.00 sec)
DAY, MONTH, YEAR
SELECT DAY('2022-09-21');
+----+
| DAY('2022-09-21') |
+----+
| 21 |
1 row in set (0.00 sec)
ADD 3 YEAR FOR BELOW DATE??????????
SELECT DATE ADD('2022-09-24',INTERVAL 3 YEAR);
+-----+
| DATE_ADD('2022-09-24',INTERVAL 3 YEAR) |
+----+
2025-09-24
+----+
1 row in set (0.00 s
ADD 6 YEAR ,7 MONTH BELOW DATE?????????//
SELECT DATE ADD(DATE ADD('1995-05-10', INTERVAL 6 YEAR), INTERVAL 7 MONTH);
+-----+
| DATE_ADD(DATE_ADD('1995-05-10', INTERVAL 6 YEAR), INTERVAL 7 MONTH) |
| 2001-12-10
1 row in set (0.00 sec)
mysgl>SUB 3 YEAR,11 MONTH,AND 20 DAY
SELECT DATE_SUB(DATE_SUB(DATE_SUB('2025-05-06', INTERVAL 3 YEAR), INTERVAL 11
MONTH), INTERVAL 20 DAY);
```

DATE_SUB(DATE_SUB INTERVAL 20 DAY)	_ `	·	, ,		MONTH),
+   2021-05-17 +			I		
+ 1 row in set (0.00 sec) EMP THOSE WHO BORN SELECT * FROM EMP -> WHERE YEAR(DOB) ++	I IN THE YEAR 1 = 1995 AND MC	995 AND NON (	OF APRIL		
EID   FNAME   LNAM DNO   CID	E   DOB   GI	ENDER   JOB	MGR   DOJ	SAL	COMM
++++   1702	N   1995-04-20	m  MANA	GER   2001   20:	17-07-07	90000.00
++++ 1 row in set (0.00 sec)	+	+	++-	+	++
WQTS ADD 2 YEAR FOR SELECT DATE_ADD(DOJ, -> FROM EMP -> ORDER BY DOJ ASC -> LIMIT 1;					
SELECT DATE_ADD( MIN -> FROM EMP;	I(DOJ),INTERVAI	2 YEAR)			
DATE FOR	MAT				
+   DATE_ADD(DOJ,INTER	VAL 2 YEAR)				
+   2019-04-17	I				
+ 1 row in set (0.00 sec)	+				
select date_format(sysd	ate(),"%r");				
+   date_format(sysdate()	,"%r")				
++   09:31:20 AM	I				
+1 1 row in set (0.00 sec)					
mysql> select date_forn	at(sysdate(),"% <sub> </sub>	p");			
+   date_format(sysdate()	,"%p")				
+					
+1 1 row in set (0.00 sec)					

```
mysql> select date_format(sysdate(),"%T");
+----+
| date format(sysdate(),"%T") |
+----+
| 09:31:55 |
+----+
1 row in set (0.00 sec)
l> select date format(sysdate(),"%H");
+----+
| date_format(sysdate(),"%H") |
+----+
1 row in set (0.00 sec)
mysql> select date format(sysdate(),"%h");
+----+
| date_format(sysdate(),"%h") |
+----+
1 row in set (0.00 sec)
mysql> select date_format(sysdate(),"%i");
+----+
| date format(sysdate(),"%i") |
+----+
+----+
1 row in set (0.00 sec)
select date format(sysdate(),"%s");
+----+
| date_format(sysdate(),"%s") |
+----+
1 row in set (0.00 sec)
Wqtd daye time expresion in below format for for the current date and time??
SELECT DATE FORMAT(SYSDATE(), '%y-%M-%d %W %H %p');
+----+
| DATE_FORMAT(SYSDATE(), '%y-%M-%d %W %H %p') |
+----+
25-May-07 Wednesday 09 AM
+----+
1 row in set (0.01 sec)
Wqtd details of the the emp were joined in the momth of may june or july?///
select * from emp
```

```
-> where month (doj)in(05,06,07);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
3 rows in set (0.01 sec)
select * from emp
 -> where date_format (doj,"%b")in('may','jun','jul');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
3 rows in set (0.00 sec)
WHO WERE HIERD ON FRIDAY, SATURDAY, SUNDAY???????
select * from emp
-> where date_format(doj,"%W") IN('FRIDAY','SATURDAY','SUNDAY');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
```

```
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f
                                    | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
                                    | SALESMAN | 1701 | 2021-12-26 |
| 2104 | AMAN | RAI | 1998-08-15 | m
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
8 rows in set (0.00 sec)
SELECT FNAME, DATE_FORMAT(DOB, '%m/%d/%Y') AS 'US DATE FORMAT'
-> FROM EMP;
+----+
| FNAME | US DATE FORMAT |
+----+
| RAHUL | 02/19/1991 |
| SAMEER | 04/20/1995 |
| JAHNAVI | 04/11/1996 |
| SHIVANI | 11/07/1998 |
| ABHIJIT | 12/25/1997 |
| KARAN | 12/26/1997 |
| MURALI | 06/08/1998 |
| DHARANI | 11/10/1998 |
| RASHMI | 10/03/1995 |
| FARIYA | 01/03/1999 |
| PRIYA | 03/20/1998 |
| AMAN | 08/15/1998 |
| KIRAN | 09/21/1999
+----+
13 rows in set (0.00 sec)
NO OF EMP HIERD IN EACH YEAR AND DISPLAY THE NUMBER MAX TO MIN BASED ON
THERIR COUNT????????????????????????
mysql> SELECT COUNT(*), YEAR(DOJ)
 -> FROM EMP
 -> GROUP BY YEAR(DOJ)
 -> ORDER BY COUNT(*) DESC;
+----+
| COUNT(*) | YEAR(DOJ) |
+----+
    5 | 2021 |
    3 | 2019 |
    2 | 2017 |
    2 | 2020 |
    1 | 2022 |
   ----+
5 rows in set (0.00 sec)
```

WQTD DETAILS OF THE EMPS WHO WERE HIERD IN LEAP YEAR????????

```
SELECT * FROM EMP
 -> WHERE MOD(YEAR(DOJ),4)=0;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
----+
2 rows in set (0.00 sec)
WQTD FNAME AND CURRENT EXPERIENCE OF THE EMP INTERNS OF YEAR?
SELECT FNAME, YEAR(CURDATE())-YEAR(DOJ) AS EXPERIENCE
 -> FROM EMP;
+----+
| FNAME | EXPERIENCE |
+----+
| RAHUL |
           8 |
I SAMEER | 8 |
| JAHNAVI |
          5 |
| SHIVANI |
          6 |
| ABHIJIT |
         6 |
         6 |
KARAN |
| MURALI |
          5 |
           4 |
| DHARANI |
           4 |
| RASHMI |
| FARIYA |
          4 |
| PRIYA |
          4 |
AMAN |
          4 |
KIRAN |
          3 |
+----+
13 rows in set (0.00 sec)
Sub query
If the emp are working same as dharani jobe role?
select fname, Iname, job
 -> from emp
 -> where job=(select job
 -> from emp
 -> where fname='dharani');
+----+
| fname | Iname | job
+----+
| DHARANI | PATIL | DEVELOPER |
```

```
| FARIYA | TAJ | DEVELOPER |
+----+
2 rows in set (0.00 sec)
Who were hierd before 2 years of the last hierd emp?
Select*
From emp
Where doj<(select date sub(max(doj),interval 2 year)
From emp);
Or
Select select date_sub(max(doj),interval 2 year
From emp
Order by desc
Limit 1
 -> From emp);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
----+
7 rows in set (0.00 sec)
Wqtd details of the emp if the emp fnma 2nd cha is A and emp lname last 2nd char is a and
getting sal less than shivani
Select * from emp
Where fname like "_A%" and SUBSTR(LNAME ,-2,1)='A' AND SAL<(Select sal
From emp
Where fname='shivani'
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
```

```
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 | 45000.00
| NULL | 111 | 506 |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
3 rows in set (0.00 sec)
DETAILS OF EMP WHO ARE ACTING AS CUSTOMER FOR THERE COMPANY AND HIERED
AFTER RAHUL BUT NOT AS MALE?
SELECT * FROM EMP
WHERE CID IS NOT NULL AND DOJ> (SELECT DOJ
FROM EMP
WHERE FNAME='RAHUL')AND GENDER !='M';
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
1 row in set (0.00 sec)
DETAILS OF THE EMP WHO ARE GETTING 3RD MIN SAL?
SELECT * FROM EMP
WHERE SAL=(
SELECT DISTINCT SAL
FROM EMP
ORDER BY SAL ASC
LIMIT 1 OFFSET 2);
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM |
DNO | CID |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00 |
NULL | 111 | NULL |
1 row in set (0.00 sec)
WQTD DETAILS OF THE EMP WHO ARE ELDER THA N SHIVANI AND GETTING SAL MORE
THAN KIRAN????????????
SELECT * FROM EMP WHERE DOB<(
SELECT DOB FROM EMP
WHERE FNAME ='SHIVANI') AND SAL>(SELECT SAL FROM EMP
WHERE FNAME='KIRAN');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
----+
```

```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
ELDER < LESS;
YOUNGER > MORE
Wqtd of emp who are getting sal more than kiran?//
Select * from emp
Where sal >(select sal
From emp
Where fname='kiran');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
```

```
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
11 rows in set (0.01 sec)
mysql>
Wgtd of emp if the emp who were hired after v2 yr of the 1st emp joining date?
Select * from emp
Where doj>(select date_add(min(doj),interval 2 year)
From emp);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
Wqtd FNAME, & Iname together as ful, name along with sal, job & dno if the the emp I
sworking in same dept as karan dept & getting sal more than priya?
Select concat (fname, '', Iname ) 'full name', sal, job, dno
From emp
Where dno=(select dno
From emp
Where fname='karan')and sal >(select sal
From emp
Where fname='priya');
```

```
| full name | sal | job | dno |
+----+
| RAHUL MUKARJEE | 100000.00 | MANAGER | 111 |
| KARAN BHAT | 45000.00 | SALESMAN | 111 |
| RASHMI GONDA | 45000.00 | SALESMAN | 111 |
| AMAN RAI | 40000.00 | SALESMAN | 111 |
+----+
DETAILS OF THE EMP WHO ARE GETTING 2RD Max SAL?
SELECT * FROM EMP
WHERE SAL=(
SELECT DISTINCT SAL
FROM EMP
ORDER BY SAL desc
LIMIT 1 OFFSET 1);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
+----+
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
Watd dname & lid of the emp karan??
Select dname ,lid
From dept
Where dno=(select dno from emp
Where fname='karan');
+----+
| dname | lid |
+----+
| MARKETING | 1 |
+----+
Wgtd deta of emp who are working in accoting dept?
Select * from emp
Where
dno=(select dno from dept
Where dname='accounting');
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM
| DNO | CID |
+----+
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
+----+
Wqtd details of emp who are working as salesman or manager in delivery dept?
Select * from emp
Where job in ('salesman', 'manager') and dno=(select dno from dept
Where dname='delivery');
```

```
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL | COMM |
DNO | CID |
+----+
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 | 90000.00
| NULL | 110 | NULL |
+----+
Wqtd det of emp who are wonking in accounting or technical dept?????/
Select * from emp
Where dno =(select dno from dept
Where dname in('accounting','technical'));
ERROR 1242 (21000): Subquery returns more than 1 row
SUBOUERY
Wqtd det of emp who are wonking in accounting or technical dept?????/
SELECT *
FROM emp
WHERE dno IN (
 SELECT dno
 FROM dept
 WHERE dname IN ('accounting', 'technical')
);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
WQTD LOCATION of the coustomer salman???????/
Select location FROM LOCATION
WHERE LID IN(SELECT LID FROM CUSTOMER
WHERE FIRST_NAME='SALMAN');
+----+
| location |
+----+
| ANDHERI |
+----+
WQTD LOCATION of the EMP SHIVANI??????
SELECT LOCATION FROM LOCATION WHERE LID IN(
SELECT LID FROM DEPT WHERE DNO IN (
SELECT DNO FROM EMP WHERE FNAME='SHIVANI'));
+----+
| LOCATION |
```

```
ANNA_NAGAR |
+----+
wqtd emp fname ,job wheretheir dept locat is located in hebbal?
Select fname, job
From emp
Where dno in (select dno from dept where lid in(
Select lid from location where location='hebbal'));
+----+
| fname | job |
+----+
| SAMEER | MANAGER |
| JAHNAVI | DISPATCHER |
| ABHIJIT | DISPATCHER |
| MURALI | DISPATCHER |
+----+
Wqtd dname of the emp who are working as salesman but not as female?
Select dname
From dept where dno in (select dno from emp where job ='salesman' and gender != 'f');
dname |
+----+
| MARKETING |
Wqtd locaton of the coustomer who are acting as employs for their company?
Select location
From location
Where lid in(select lid from customer where cid in (select cid from emp));
+----+
| location |
+----+
| VIJAYANAGAR |
| SAIDAPET |
| MARINA
| HEBBAL
+----+
Wqtd details of customer who have ordered some product?
Select * from customer
Where order_id in(select order_id from orders );
Select * from customer
Where order_id is not null;
or
Select * from customer
Where product_id is not null;
or
Select * from customer
Where product_id in(select product_id from orders);
+----+----------+
```

```
| CID | FIRST_NAME | LAST_NAME | LID | ORDER_ID | PRODUCT_ID |
+----+
| 501 | SALMAN | KHAN | 12 | 1201 |
                                809 l
| 505 | ABHIJIT | GOWDA | 11 | 1111 | 801 |
| 507 | HEMA | SHETTY | 3 | 1127 |
                               805 l
| 511 | SELVA | MANI | 12 | 1773 |
                               802 l
+----+
4 rows in set (0.00 sec)
Wqtd details of the emp who are working in vijayanager?
Select * from emp
Where dno in (select dno from dept where lid in)
Select lid from location where location='vijayanagar'));
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
Wqtd details of emp who delivered the product to the customer who bwlogs to mumbai
Select * from emp where eid in
(select eid from orders where order id in
(select order_id from customer where lid in (
Select lid from location where city ='mumbai')));
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
2 rows in set (0.01 sec)
```

## ALL OPERATOR(AND)

```
Wqtd details of emps who are geeting sal more than all the salesman?
SELECT *
FROM emp
WHERE sal > all(
 SELECT sal
 FROM emp
 WHERE job = 'salesman'
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
WHITHOUT ALL OPERATOR
SELECT *
FROM emp
WHERE sal > (
 SELECT MAX(sal)
 FROM emp
 WHERE job = 'salesman'
```

### **ANY OPERATOR(OR)**

WQTD details of the emps who are getting sal more than any one of the salesman???//////

Select \* from emp
Where sal > any(select sal from emp where job='salesman');

+----+

----+

| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |

COMM | DNO | CID |

```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
----+
WITHOUT ANY
SELECT *
FROM emp
WHERE sal > (
 SELECT MIN( sal)
 FROM emp
 WHERE job = 'salesman'
WQTD number of emps hired in same month????
Select count(*),month(doj)
From emp
Group by month(doj)
Having count(*) >1;
+----+
| count(*) | month(doj) |
+----+
    2 |
           2 |
    3 |
           12 |
    2 |
           3 |
Wqtd details of the emp who were hierd after 3 year of sameer but before 1 yaer of kieran?
2020+3=2025
2028-1 = 2027
Select * from emp
Where doj>(select date_add(doj,interval 3 year)
Where fname ='sameer') and doj<(select date sub(doj,interval 1 year)
```

```
From emp
Where fname='kiran');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
ASSIGNMENT QUE
Wqtd details of emp whO has working experinece more than kiran but less than murali?
SELECT *
FROM emp
WHERE doj < (SELECT doj FROM emp WHERE fname = 'kiran')
AND doj > (SELECT doj FROM emp WHERE fname = 'murali');
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 | 40000.00
| NULL | 111 | NULL |
Wqtd working state of the emp who are getting 2nd max salary?
SELECT *
FROM emp
WHERE sal = (
 SELECT MAX(sal)
 FROM emp
 WHERE sal < (
  SELECT MAX(sal) FROM emp
```

```
)
):
```

Wqtd details of dept if more tham 3 emps working in each dept?

Wqtd details of emp who are working in the dept having hidhest sal?

Wqtd fname and working experince iof the emp who worked longer than average tenure at the company

Ang tenure: avgworking exp of all the emp..

# EMP AND MGR RELATIONSHIP case=1(to find mgr details

```
DQTD full name of jahnavi 's manager?
Select concat(fname," ",Iname)from emp where eid in(Select mgr
From emp
Where fname ='jahnavi');
+----+
| concat(fname," ",Iname) |
+----+
SAMEER KHAN
+----+
DQTD dname of rashmi's manager?
Select dname from dept
Where dno in (Select dno from emp
Where eid in (select mgr from emp where fname='rashmi'));
+----+
| dname |
+----+
| MARKETING |
Wqtd details of rahuls manager'manager?
Select * from emp
```

```
Where eid in (select mgr from emp where eid in (select mgr from emp where
fname='rahul'));
-----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
1 row in set (0.00 sec)
Case=2(to find emp details)
Wqtd details of the emp who are reporting to murALI?
SELECT * FROM EMP
WHERE MGR IN ( SELECT EID FROM EMP
WHERE FNAME='MURALI');
--+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00 |
3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
4 rows in set (0.01 sec
Bot case 1 & 2
Wqtd details of the emps who are reporting to muralis manager?
Select *
from emp
Where mgr in (select eid
from emp
Where eid in (select mgr
from emp
Where fname='murali'));
```

Wqtd dname of the emp who are reporting to janavi manager?

```
Select dname
From dept
Where dno in (Select dno
from emp
Where mgr in (select eid
from emp
Where eid in (select mgr
from emp
Where fname='jahnavi')));
+----+
| dname |
+----+
| MARKETING |
| DELIVERY |
Wqtd working location of the emp who are reporting to abhijit's manager manager?
Select location
from location
where lid in(Select lid
from dept
where dno in (Select dno
from emp
where mgr in (Select eid
from emp
where eid in (select mgr
from emp
Where eid in (Select mgr
```

| location | +----+

from emp

| HEBBAL | | ANNA\_NAGAR |

| KORMANGALA |

+----+

#### **CROSS JOIN**

Where fname = 'abhijit'))));

wqtd cartision product from emp and dept tablr? Select \* from emp e cross join dept d;

13\*5=65 row 13 +5=18 col

Select e.dno, d.dno from emp e cross join dept d;



```
Select * from emp e inner join dept d
 -> on e.dno=d.dno;
----+-----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID | DNO | DNAME | LID |
----+----+
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL | 111 | MARKETING | 1 |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL | 110 | DELIVERY | 2 |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL | 110 | DELIVERY | 2 |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 | 113 | TECHNICAL | 10 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 | 110 | DELIVERY | 2 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 | 111 | MARKETING | 1 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL | 110 | DELIVERY | 2 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL | 113 | TECHNICAL | 10 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL | 111 | MARKETING | 1 |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL | 113 | TECHNICAL | 10 |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL | 112 | ACCOUNTING | 4 |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL | 111 | MARKETING | 1 |
----+----+
12 rows in set (0.00 sec)
Wqtd customer first_name and his location?
Select c.first_name ,l.location
From customer c inner join location I
On c.lid=l.lid;
+----+
| first_name | location |
+----+
| SALMAN | ANDHERI
| SHIVANI | VIJAYANAGAR |
KIRAN | HEBBAL |
| VIHAN | RAIDURG
                   ı
| ABHIJIT | SAIDAPET |
| KARAN | MARINA
```

|wqtd details from emp and dept table?

```
| PUNITH | KORMANGALA |
| PATRICK | JUHU
                  | JEEVAN | ANNA_NAGAR |
| SELVA | ANDHERI |
IRFAN
       | KUVEMPUNAGAR |
+----+
Wqtd emp fname, Iname, job & his dname if the emp are working as salesamn or manager?
Select e.fname,e.lname,e.job,d.dname
From emp e inner join dept d
On e.dno =d.dno
Where e.job in ('salesman', 'manager');
+----+
| fname | Iname | job | dname
+----+
| RAHUL | MUKARJEE | MANAGER | MARKETING |
| SAMEER | KHAN | MANAGER | DELIVERY |
| KARAN | BHAT | SALESMAN | MARKETING |
| RASHMI | GONDA | SALESMAN | MARKETING |
| AMAN | RAI | SALESMAN | MARKETING |
+----+
Wqtd emp fname, Iname, dname if the is working in hr dept?
Select e.fname,e.lname,d.dname
From emp e inner join dept d
On e.dno =d.dno
Where d.dname='hr';
Empty set (0.00 sec)
Wqtd coustomer first name, last name, and emp fname if the customer is actind as emp for
the company?
Select c.first_name ,c.last_name,e.fname
From customer cinner join emp e
On c.cid=e.cid;
+----+
| first_name | last_name | fname |
+----+
| SHIVANI | RAI | SHIVANI |
| ABHIJIT | GOWDA | ABHIJIT |
|KARAN | BHAT | KARAN |
| KIRAN | RAJ | KIRAN |
Wqtd emp fname, Iname, job and dno along with their dname if the emp is working as
salesman ,manager or developer in dno 110,111 or 112 and his fname 3 rd char is H?
SELECT E.fname ,E.lname,D.DNO,D.DNAME,e.job
FROM EMP E INNER JOIN DEPT D
ON E.DNO=D.DNO
WHERE E.JOB IN ('SALESMAN', 'MANAGER', 'DEVELOPER') AND D.DNO IN (110,111,112) AND
substring(e.fname,3,1)='h';
+-----+
```

| HEMA | RAJAJINAGAR |

```
| fname | Iname | DNO | DNAME | job |
+----+
| RAHUL | MUKARJEE | 111 | MARKETING | MANAGER |
+-----+
If we use like
e.fname like '__h%';
+wqtd details of emp along with their dname if the emp born after the year 1995?
Select e.* ,d.dname
From emp e inner join dept d
On e.dno=d.dno
Where year(e.dob)>1995;
----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID | dname |
----+
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL | DELIVERY |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 | TECHNICAL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m
                                    | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 | DELIVERY |
| 1903 | KARAN | BHAT | 1997-12-26 | m
                                   | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 | MARKETING |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m
                                      | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL | DELIVERY |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL | TECHNICAL |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL | TECHNICAL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL | ACCOUNTING |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL | MARKETING |
WQTD EMP fnme & password ,the password must contain below cod
1) first 3 char of fname
   2. Emp dept lid
   3. Emp year of birth
    Select e.fname,concat(substr(e.fname,1,3),d.lid,year(e.dob)) as passwod
    From emp e inner join dept d
    On e.dno=d.dno;
    +----+
    | fname | passwod |
    +----+
    | RAHUL | RAH11991 |
    | SAMEER | SAM21995 |
```

```
| SHIVANI | SHI101998 |
     | ABHIJIT | ABH21997 |
     | KARAN | KAR11997 |
     | MURALI | MUR21998 |
     | DHARANI | DHA101998 |
     | RASHMI | RAS11995 |
     | FARIYA | FAR101999 |
     | PRIYA | PRI41998 |
     | AMAN | AMA11998 |
     +----+
     Wgtd emp fname, dame and his dept location
Select e.fname,d.dname,l.location
From emp e inner join dept d
On e.dno =d.dno inner join location I
On d.lid=l.lid;
+----+
| fname | dname | location |
+----+
| RAHUL | MARKETING | VIJAYANAGAR |
| SAMEER | DELIVERY | HEBBAL
| JAHNAVI | DELIVERY | HEBBAL
| SHIVANI | TECHNICAL | ANNA_NAGAR |
| ABHIJIT | DELIVERY | HEBBAL
| KARAN | MARKETING | VIJAYANAGAR |
| MURALI | DELIVERY | HEBBAL
| DHARANI | TECHNICAL | ANNA_NAGAR |
| RASHMI | MARKETING | VIJAYANAGAR |
| FARIYA | TECHNICAL | ANNA NAGAR |
| PRIYA | ACCOUNTING | KORMANGALA |
| AMAN | MARKETING | VIJAYANAGAR |
+----+
Select e.fname,d.dname,l.location
From emp e inner join dept d inner join location I
On e.dno =d.dno and d.lid=l.lid;
-+wqtd details of emp along with dname ,location and city if the emp fname contains exactly
1 A?
Select e.*,d.dname ,l.location,l.city
from emp e inner join dept d inner join location l
On e.dno=d.dno and d.lid=l.lid
Where length(e.fname)-length(replace(e.fname, 'a', ' '))=1;
Empty set (0.00 sec)
```

| JAHNAVI | JAH21996 |

Or

Wqtd customer first\_name ,order\_id,delivery\_date ,price as total\_bill ,location ,city ,state if the customer orderd some product?

```
Select c.first_name,c.order_id,o.delivery_date,p.price as "total_bill",l.location ,l.city,l.state From customer c inner join orders o inner join product p inner join location I On c.order_id=o.order_id and o.product_id=p.product_id and c.lid=l.lid;
```

```
| first_name | order_id | delivery_date | total_bill | location | city | state | total_bill | total_bill | location | city | state | total_bill | location | city | state | total_bill | total_bill | location | city | state | total_bill | total_bill | location | city | state | total_bill | to
```

## WQTD TOTAL REVENUE GENERATED BY EACH STATE???????

Select sum(p.price),l.state

From customer c inner join product p inner join location I

On c.product\_id =p.product\_id and c.lid=l.lid

Group by I.state;

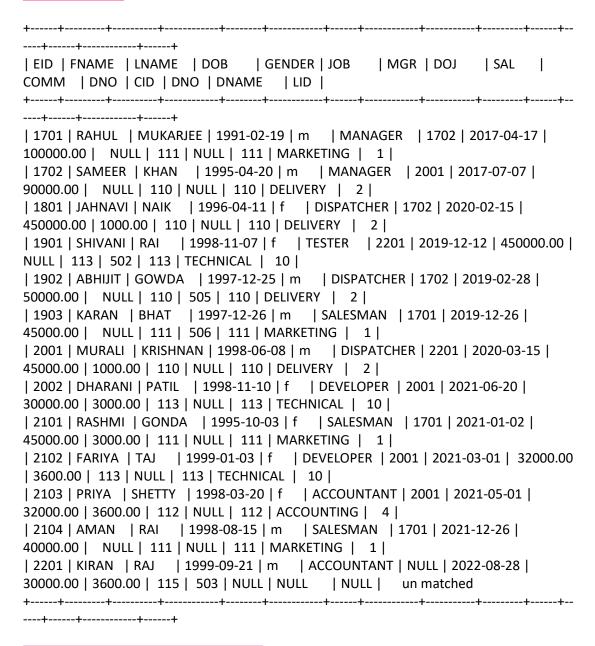
```
+-----+
| sum(p.price) | state |
+-----+
| 21750.00 | MAHARASHTRA |
| 2000.00 | TAMIL_NADU |
| 1000.00 | KARNATAKA |
```

Wqtd top 2 customer first\_name with spent money?

```
Select c.first_name,sum(p.price) as spent_money
From customer c inner join product p
On c.product_id=p.product_id
Group by c.first_name
Order by spent_money desc
Limit 2;
+------+
| first_name | spent_money |
+-----+
| SELVA | 20000.00 |
| ABHIJIT | 2000.00
```

# Outer join Left outer join

Emp-left Dept-right Select \*
From emp e left outer join dept d
On e.dno=d.dno;



# RIGTHT OUTER JOIN

Emp-RIGHT Dept-LEFT

```
Select *
From emp e RIGHT outer join dept d
On e.dno=d.dno;
---+-----+----+----+----+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID | DNO | DNAME | LID |
```

```
----+----+
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL | 110 | DELIVERY | 2 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 | 110 | DELIVERY | 2 |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL | 110 | DELIVERY | 2 |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL | 110 | DELIVERY | 2 |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL | 111 | MARKETING | 1 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL | 111 | MARKETING | 1 |
45000.00 | NULL | 111 | 506 | 111 | MARKETING | 1 |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL | 111 | MARKETING | 1 |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL | 112 | ACCOUNTING | 4 |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL | 113 | TECHNICAL | 10 |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL | 113 | TECHNICAL | 10 |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 | 113 | TECHNICAL | 10 |
NULL | NULL | 114 | HR | 12 |
----+----+
13 rows in set (0.01 sec)
WQTD LOCATION WHERE NO CUSTOMER LIVES OVER THERE?
SELECT *
FROM LOCATION L LEFT OUTER JOIN CUSTOMER C
ON L.LID=C.LID
WHERE C.LID IS NULL;
+----+
| LID | LOCATION | CITY | STATE | CID | FIRST_NAME | LAST_NAME | LID |
ORDER_ID | PRODUCT_ID |
+----+
| 6 | AMEERPET | HYDERABAD | TELANGANA | NULL | NULL | NULL | NULL |
8 | DILSUKHNAGAR | HYDERABAD | TELANGANA | NULL | NULL | NULL | NULL |
NULL |
       NULL |
| 14 | GOREGAON | MUMBAI | MAHARASHTRA | NULL | NULL | NULL | NULL |
NULL |
       NULL |
| 15 | BORIVALI | MUMBAI | MAHARASHTRA | NULL | NULL | NULL | NULL |
NULL |
       NULL |
```

```
WQTD PRODUCT DETAILS IF THE CUSTOMER HAS NOT ORDERES THE PRODUCT?
SELECT P.*
FROM CUSTOMER C RIGHT OUTER JOIN PRODUCT P
ON C.PRODUCT ID=P.PRODUCT ID
WHERE C.PRODUCT_ID IS NULL;
+----+
| PRODUCT ID | PNAME | PRICE |
+----+
    803 | WATCH | 15000.00 |
    804 | EAR PODS | 1500.00 |
    806 | IPHONE | 1300.00 |
    807 | WALLET | 2500.00 |
    808 | PTron | 800.00 |
+----+
WQTD LOCATION WHERE NO DEPT AREV LOCATED IN THAT AREA?????
SELECT L.LOCATION
FROM LOCATION L LEFT OUTER JOIN DEPT D
ON L.LID=D.LID
WHERE D.LID IS NULL;
+----+
| LOCATION |
+----+
| RAJAJINAGAR |
| KUVEMPUNAGAR |
| AMEERPET |
| RAIDURG |
| DILSUKHNAGAR |
| MARINA |
| SAIDAPET |
| JUHU |
| GOREGAON |
| BORIVALI |
+----+
SFI F JOIN
WQTD EMP FNAME, JOB, AND HIS MANAGER FNAME, JOB FROM EMP TABLE?
SELECT E1. FNAME, E1. JOB, E2. FNAME, E2. JOB, E1. mgr, E2. EID
FROM EMP E1 JOIN EMP E2
ON E1.MGR =E2.EID;
+----+
| FNAME | JOB | FNAME | JOB | mgr | EID |
+----+
| RAHUL | MANAGER | SAMEER | MANAGER | 1702 | 1702 |
| SAMEER | MANAGER | MURALI | DISPATCHER | 2001 | 2001 |
| JAHNAVI | DISPATCHER | SAMEER | MANAGER | 1702 | 1702 |
| SHIVANI | TESTER | KIRAN | ACCOUNTANT | 2201 | 2201 |
ABHIJIT | DISPATCHER | SAMEER | MANAGER | 1702 | 1702 |
KARAN | SALESMAN | RAHUL | MANAGER | 1701 | 1701 |
| MURALI | DISPATCHER | KIRAN | ACCOUNTANT | 2201 | 2201 |
| DHARANI | DEVELOPER | MURALI | DISPATCHER | 2001 | 2001 |
```

```
| RASHMI | SALESMAN | RAHUL | MANAGER | 1701 | 1701 |
| FARIYA | DEVELOPER | MURALI | DISPATCHER | 2001 | 2001 |
| PRIYA | ACCOUNTANT | MURALI | DISPATCHER | 2001 | 2001 |
AMAN | SALESMAN | RAHUL | MANAGER | 1701 | 1701 |
+----+
Wqtd emp fname, sal, along with manager fname, sal if the emp is getting salary more tha
35000 and manager is getting sal less than 500000?
Select e1.fname,e1.sal,e2.fname,e2.sal
From emp e1 join emp e2
On e1.mgr=e2.eid
Where e1.sal>35000 and e2.sal< 5000000;
+----+
| fname | sal | fname | sal
+----+
| RAHUL | 100000.00 | SAMEER | 90000.00 |
| SAMEER | 90000.00 | MURALI | 45000.00 |
| JAHNAVI | 450000.00 | SAMEER | 90000.00 |
| SHIVANI | 450000.00 | KIRAN | 30000.00 |
| ABHIJIT | 50000.00 | SAMEER | 90000.00 |
| KARAN | 45000.00 | RAHUL | 100000.00 |
| MURALI | 45000.00 | KIRAN | 30000.00 |
| RASHMI | 45000.00 | RAHUL | 100000.00 |
| AMAN | 40000.00 | RAHUL | 100000.00 |
+----+
181)wqtd emp fname,dob along manager fname,dob if the emp is elder than manager?/
Select e1.fname,e1.dob,e2.fname,e2.dob
From emp e1 join emp e2
on e1.mgr=e2.eid
Where e1.dob <e2.dob;
| fname | dob | fname | dob
+----+
| RAHUL | 1991-02-19 | SAMEER | 1995-04-20 |
| SAMEER | 1995-04-20 | MURALI | 1998-06-08 |
| SHIVANI | 1998-11-07 | KIRAN | 1999-09-21 |
| MURALI | 1998-06-08 | KIRAN | 1999-09-21 |
| PRIYA | 1998-03-20 | MURALI | 1998-06-08 |
+----+
Wqtd emp fname,manager ,fname along with emp dname?????????
Select e1.fname,e2.fname,d1.dname
From emp e1 join emp e2 inner join dept d1
On e1.mgr=e2.eid and e1.dno=d1.dno;
+----+
| fname | fname | dname
+----+
| RAHUL | SAMEER | MARKETING |
| SAMEER | MURALI | DELIVERY |
| JAHNAVI | SAMEER | DELIVERY |
| SHIVANI | KIRAN | TECHNICAL |
| ABHIJIT | SAMEER | DELIVERY |
```

```
| KARAN | RAHUL | MARKETING |
| MURALI | KIRAN | DELIVERY |
| DHARANI | MURALI | TECHNICAL |
| RASHMI | RAHUL | MARKETING |
| FARIYA | MURALI | TECHNICAL |
| PRIYA | MURALI | ACCOUNTING |
| AMAN | RAHUL | MARKETING |
+----+
Wqtd emp fname, job, emp dname and manager fname, job, manager dname if the emp
working as manager or salesman and emp dname is either marketing or delivery and
manager is working as manager?
Select e1.fname,e1.job,d1.dname,e2.fname,e2.job,d2.dname
From emp e1 join emp e2 inner join dept d1 inner join dept d2
On e1.mgr=e2.eid and e1.dno=d1.dno and e2.dno=d2.dno
Where e1.job in('manager', 'salesman') and d1. dname in ('marketing', 'delivery') and
e2.job='manager';
+-----+
| fname | job | dname | fname | job | dname |
+-----+
| RAHUL | MANAGER | MARKETING | SAMEER | MANAGER | DELIVERY |
| KARAN | SALESMAN | MARKETING | RAHUL | MANAGER | MARKETING |
| RASHMI | SALESMAN | MARKETING | RAHUL | MANAGER | MARKETING |
| AMAN | SALESMAN | MARKETING | RAHUL | MANAGER | MARKETING |
Wqtd emp fname ,dname,dept location along with manager fname ,dname,dept ,dept
location?
Select e1.fname,d1.dname,l1.location, e2.fname,d2.dname,l2.location
From emp e1 join emp e2 inner join dept d1 inner join dept d2 inner join location l1 inner
join location 12
On e1.mgr=e2.eid and e1.dno=d1.dno and d1.lid=l1.lid and d2.lid=l2.lid and e2.dno=d2.dno;
-----+
| fname | dname | location | fname | dname | location |
+-----+
| RAHUL | MARKETING | VIJAYANAGAR | SAMEER | DELIVERY | HEBBAL
| SAMEER | DELIVERY | HEBBAL | MURALI | DELIVERY | HEBBAL
| JAHNAVI | DELIVERY | HEBBAL | SAMEER | DELIVERY | HEBBAL
| ABHIJIT | DELIVERY | HEBBAL | SAMEER | DELIVERY | HEBBAL
KARAN | MARKETING | VIJAYANAGAR | RAHUL | MARKETING | VIJAYANAGAR |
| DHARANI | TECHNICAL | ANNA_NAGAR | MURALI | DELIVERY | HEBBAL
| RASHMI | MARKETING | VIJAYANAGAR | RAHUL | MARKETING | VIJAYANAGAR |
| FARIYA | TECHNICAL | ANNA NAGAR | MURALI | DELIVERY | HEBBAL
PRIYA | ACCOUNTING | KORMANGALA | MURALI | DELIVERY | HEBBAL
| AMAN | MARKETING | VIJAYANAGAR | RAHUL | MARKETING | VIJAYANAGAR |
+-----+
Watd working location of aman's manager?
Select I2.location
From emp e1 join emp e2 inner join dept d2 inner join location l2
On e1.mgr=e2.eid and e2.dno=d2.dno and d2.lid=l2.lid
```

```
Where e1.fname='aman';
+----+
| location |
+----+
| VIJAYANAGAR |
+----+
Wqtd fname of amans manager's manager???????
Select e3.fname
From emp e1 join emp e2 join emp e3
On e1.mgr=e2.eid and e2.mgr =e3.eid
Where e1.fname='aman';
+----+
| fname |
+----+
| SAMEER |
+----+
Wqtd details of the emp who are getting salary more than kiran?
Select e1.*
From emp e1 join emp e2
On e1.sal > e2.sal
Where e2.fname='kiran';
--+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
40000.00 | NULL | 111 | NULL |
```

# Natural join

```
Select * from emp e natural join dept d;
| DNO | EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL
| COMM | CID | DNAME | LID |
----+-----+
| 111 | 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17
| 110 | 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | NULL | DELIVERY | 2 |
| 110 | 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | NULL | DELIVERY | 2 |
| 113 | 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 |
450000.00 | NULL | 502 | TECHNICAL | 10 |
| 110 | 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28
| 50000.00 | NULL | 505 | DELIVERY | 2 |
| 111 | 1903 | KARAN | BHAT | 1997-12-26 | m | | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 506 | MARKETING | 1 |
| 110 | 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-
15 | 45000.00 | 1000.00 | NULL | DELIVERY | 2 |
| 113 | 2002 | DHARANI | PATIL | 1998-11-10 | f
                                      | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | NULL | TECHNICAL | 10 |
| 111 | 2101 | RASHMI | GONDA | 1995-10-03 | f
                                      | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | NULL | MARKETING | 1 |
| 113 | 2102 | FARIYA | TAJ | 1999-01-03 | f
                                    | DEVELOPER | 2001 | 2021-03-01 |
32000.00 | 3600.00 | NULL | TECHNICAL | 10 |
32000.00 | 3600.00 | NULL | ACCOUNTING | 4 |
| 111 | 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | NULL | MARKETING | 1 |
---+----+
Select * from emp e natural join location l;
Merded record
mysql> Select * from emp e natural join emp f;
Empty set (0.00 sec)
set operation
(select fname
From emp)
Union (select fname
From emp);
+----+
| fname |
+----+
```

```
| RAHUL |
| SAMEER |
| JAHNAVI |
| SHIVANI |
| ABHIJIT |
KARAN |
| MURALI |
| DHARANI |
| RASHMI |
| FARIYA |
| PRIYA |
| AMAN |
| KIRAN |
+----+
(select fname
From emp)
Union all(select fname
From emp);
+----+
| fname |
+----+
| RAHUL |
| SAMEER |
| JAHNAVI |
| SHIVANI |
| ABHIJIT |
| KARAN |
| MURALI |
| DHARANI |
| RASHMI |
| FARIYA |
| PRIYA |
| AMAN |
KIRAN |
| RAHUL |
| SAMEER |
| JAHNAVI |
| SHIVANI |
| ABHIJIT |
| KARAN |
| MURALI |
| DHARANI |
| RASHMI |
| FARIYA |
| PRIYA |
| AMAN |
| KIRAN |
26 rows in set (0.00 sec)
(select fname, job
```

From emp)

```
From emp);
ERROR 1222 (21000): The used SELECT statements have a different number of columns
(select job
From emp)
Union all(select fname
From emp);
        | job
| MANAGER |
| MANAGER |
| DISPATCHER |
| TESTER |
| DISPATCHER |
| SALESMAN |
| DISPATCHER |
| DEVELOPER |
| SALESMAN |
| DEVELOPER |
| ACCOUNTANT |
| SALESMAN |
| ACCOUNTANT |
RAHUL
SAMEER
| JAHNAVI |
| SHIVANI |
| ABHIJIT |
KARAN
| MURALI |
| DHARANI |
| RASHMI |
| FARIYA |
PRIYA |
AMAN
| KIRAN
26 rows in set (0.00 sec)
To overcome this pass aliase name
(select job as job_fname
From emp)
Union all(select fname
From emp);
Ε
Wqtd job ,fname,in lower case if the emps are working as salesman else print job ,fname in
reverse format?
(Select job ,lower(fname) as fname
From emp
Where job='salesman')
```

Union all(select fname

```
Union (select job, reverse (fname)
From emp
Where job!= 'salesman');
+----+
| job | fname |
+----+
| SALESMAN | karan |
| SALESMAN | rashmi |
| SALESMAN | aman |
| MANAGER | LUHAR |
| MANAGER | REEMAS |
| DISPATCHER | IVANHAJ |
| TESTER | INAVIHS |
| DISPATCHER | TIJIHBA |
| DISPATCHER | ILARUM |
| DEVELOPER | INARAHD |
| DEVELOPER | AYIRAF |
| ACCOUNTANT | AYIRP |
| ACCOUNTANT | NARIK |
+----+
Wgtd matched and unmatched records from emp and dept table?
Emp:left
Dept:Right
(select * from emp e left outer join dept d
On e.dno=d.dno)
Union (
select * from emp e right outer join dept d
On e.dno=d.dno);
----+-----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID | DNO | DNAME | LID |
----+-----+
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL | 111 | MARKETING | 1 |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL | 110 | DELIVERY | 2 |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL | 110 | DELIVERY | 2 |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 | 113 | TECHNICAL | 10 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 | 110 | DELIVERY | 2 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 | 111 | MARKETING | 1 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL | 110 | DELIVERY | 2 |
```

```
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL | 113 | TECHNICAL | 10 |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL | 111 | MARKETING | 1 |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL | 113 | TECHNICAL | 10 |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL | 112 | ACCOUNTING | 4 |
40000.00 | NULL | 111 | NULL | 111 | MARKETING | 1 |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 | NULL | NULL | NULL |
| NULL |
NULL | NULL | NULL | 114 | HR | 12 |
14 rows in set (0.01 sec)
Wqtd details of 3rd amd 5th record from emp table?
(Select * from emp limit 1 offset 2)
Union
(select * from emp limit 1 offset 4);
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
2 rows in set (0.00 sec)
Create database demo;
To disable AutoCommit in mysql
Set AutoCommit=0;
Query OK, 0 rows affected (0.01 sec)
mysql> show tables;
Empty set (0.08 sec)
mysql> create table employee
 -> (id int not null,
 -> name varchar(20) not null);
Query OK, 0 rows affected (0.06 sec)
```

```
mysql> insert into employee values(1,"rohit"),(2,'virat');
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0
mysql> desc employee;
+----+
| Field | Type | Null | Key | Default | Extra |
+----+
           | NO | | NULL | |
id int
| name | varchar(20) | NO | NULL |
+----+
2 rows in set (0.01 sec)
select *from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
+----+
To lodout frow server
Exit
To disable autocommit
Set AutoCommit=0;
Saved permentely insite the table
Commit
Set AutoCommit=0;
Query OK, 0 rows affected (0.00 sec)
mysql> insert into employee values(3,'hardik');
Query OK, 1 row affected (0.00 sec)
mysql> update employee set name='pandya'where id=3;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
Rollback
Rollback;
Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.
mysql> use demo;
Database changed
```

```
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
+----+
2 rows in set (0.00 sec)
mysql> insert into employee values(3,'hardik');
Query OK, 1 row affected (0.01 sec)
mysql> Commit;
Query OK, 0 rows affected (0.00 sec)
mysql> insert into employee values(4,'kl rahul');
Query OK, 1 row affected (0.01 sec)
mysql> Commit;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
+----+
4 rows in set (0.00 sec)
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
+----+
4 rows in set (0.00 sec)
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
```

```
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
+----+
4 rows in set (0.00 sec)
mysql> insert into employee values(5,'anu');
Query OK, 1 row affected (0.01 sec)
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
| 5 | anu |
+----+
5 rows in set (0.00 sec)
mysql> set autocommit=0;
Query OK, 0 rows affected (0.00 sec)
mysql> insert into employee values(6,'janu');
Query OK, 1 row affected (0.00 sec)
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
| 5 | anu |
+----+
5 rows in set (0.00 sec)
mysql>
delete from employee
 -> where id=4;
```

```
Query OK, 1 row affected (0.00 sec)
mysql> delete from employee
  -> where id=5;
Query OK, 1 row affected (0.00 sec)
select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
To get back kl rahul back
We use
Rollback:
delete from employee
       where id=3;
Query OK, 1 row affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
+----+
2 rows in set (0.00 sec)
mysql> rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
+----+
3 rows in set (0.00 sec)
If we use commit means we can not rollback
select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
```

```
| 3 | hardik |
+----+
3 rows in set (0.00 sec)
mysql> commit;
Query OK, 0 rows affected (0.01 sec)
mysql> Rollback;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
+----+
Another 3 record
insert into employee values(4,'kl rahul');
Query OK, 1 row affected (0.00 sec)
mysql> commit;
Query OK, 0 rows affected (0.01 sec)
mysql> insert into employee values(5,'jadeja');
Query OK, 1 row affected (0.00 sec)
mysql> commit;
Query OK, 0 rows affected (0.01 sec)
mysql> insert into employee values(6, 'ashwin');
Query OK, 1 row affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
| 5 | jadeja |
| 6 | ashwin |
+----+
6 rows in set (0.00 sec)
mysql>
```

savepoint

```
savepoint h1;
Query OK, 0 rows affected (0.00 sec)
mysql> insert into employee values(7,'bumrah');
Query OK, 1 row affected (0.00 sec)
mysql> savepoint h2;
Query OK, 0 rows affected (0.00 sec)
mysql> insert into employee values(8,'pant');
Query OK, 1 row affected (0.00 sec)
mysql> savepoint h3;
Query OK, 0 rows affected (0.00 sec)
mysql> insert into employee values(9,'iyer');
Query OK, 1 row affected (0.00 sec)
select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
| 5 | jadeja |
| 6 | ashwin |
| 7 | bumrah |
| 8 | pant |
| 9 | iyer |
+----+
Syntax to delet last 3 insert operation
Col
Rollback to h1;
Query OK, 0 rows affected (0.00 sec)
mysql> select * from employee;
+----+
| id | name |
+----+
| 1 | rohit |
| 2 | virat |
| 3 | hardik |
| 4 | kl rahul |
| 5 | jadeja |
| 6 | ashwin |
+----+
6 rows in set (0.00 sec)
```

## **DCL Command**

```
use information schema;
Database changed
mysql> show tables;
| Tables in information schema
    -----+
| ADMINISTRABLE_ROLE_AUTHORIZATIONS
| APPLICABLE_ROLES
| CHARACTER SETS
| CHECK_CONSTRAINTS
| COLLATION_CHARACTER_SET_APPLICABILITY |
| COLLATIONS
| COLUMN PRIVILEGES
| COLUMN STATISTICS
| COLUMNS
| COLUMNS_EXTENSIONS
| ENABLED ROLES
 ENGINES
| EVENTS
| FILES
| INNODB_BUFFER_PAGE
| INNODB_BUFFER_PAGE_LRU
INNODB BUFFER POOL STATS
| INNODB_CACHED_INDEXES
| INNODB_CMP
| INNODB_CMP_PER_INDEX
INNODE CMP PER INDEX RESET
INNODB CMP RESET
| INNODB_CMPMEM
| INNODB_CMPMEM_RESET
| INNODB_COLUMNS
INNODB DATAFILES
| INNODB_FIELDS
| INNODB_FOREIGN
| INNODB_FOREIGN_COLS
| INNODB_FT_BEING_DELETED
INNODB FT CONFIG
| INNODB_FT_DEFAULT_STOPWORD
| INNODB FT DELETED
| INNODB_FT_INDEX_CACHE
| INNODB_FT_INDEX_TABLE
| INNODB_INDEXES
| INNODB_METRICS
| INNODB_SESSION_TEMP_TABLESPACES
| INNODB_TABLES
| INNODB_TABLESPACES
| INNODB_TABLESPACES_BRIEF
| INNODB_TABLESTATS
```

```
| INNODB_TEMP_TABLE_INFO
| INNODB_TRX
| INNODB VIRTUAL
KEY_COLUMN_USAGE
| KEYWORDS
 OPTIMIZER_TRACE
| PARAMETERS
 PARTITIONS
 PLUGINS
 PROCESSLIST
 PROFILING
| REFERENTIAL CONSTRAINTS
| RESOURCE_GROUPS
| ROLE_COLUMN_GRANTS
| ROLE_ROUTINE_GRANTS
| ROLE TABLE GRANTS
| ROUTINES
| SCHEMA_PRIVILEGES
| SCHEMATA
| SCHEMATA_EXTENSIONS
ST GEOMETRY COLUMNS
| ST_SPATIAL_REFERENCE_SYSTEMS
| ST_UNITS_OF_MEASURE
| STATISTICS
| TABLE_CONSTRAINTS
| TABLE CONSTRAINTS EXTENSIONS
| TABLE_PRIVILEGES
| TABLES
| TABLES_EXTENSIONS
| TABLESPACES
| TABLESPACES EXTENSIONS
| TRIGGERS
| USER_ATTRIBUTES
USER_PRIVILEGES
| VIEW_ROUTINE_USAGE
| VIEW_TABLE_USAGE
| VIEWS
79 rows in set (0.01 sec)
select * from USER ATTRIBUTES;
USER
            | HOST
                     | ATTRIBUTE |
| mysql.infoschema | localhost | NULL
| mysql.session | localhost | NULL |
             | localhost | NULL
| mysql.sys
           | localhost | NULL
root
4 rows in set (0.03 sec)
```

select user();

```
+-----+
| user() |
+-----+
| root@localhost |
+-----+
1 row in set (0.00 sec)
Create user 'pentagon' @ 'localhost' identified by 'pentagon';
```

To check

## Next in command prompt

C:\Users\ANUSHREE>cd C:\Program Files\MySQL\MySQL Server 8.0\bin C:\Program Files\MySQL\MySQL Server 8.0\bin>mysql -u pentagon -p Enter password: \*\*\*\*\*\*\*

Welcome to the MySQL monitor. Commands end with ; or \g. Your MySQL connection id is 14 Server version: 8.0.41 MySQL Community Server - GPL

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Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

```
select user();

+-----+

| user() |

+-----+

| pentagon@localhost |

+------+
```

Use amazon; GRANT SELECT ON EMP TO 'pentagon'@'localhost'; Query OK, 0 rows affected (0.01 sec)

```
SHOW DATABASES;
+----+
Database
+----+
amazon
| information schema |
| performance schema |
+----+
3 rows in set (0.00 sec)
mysql> USE AMAZON;
Database changed
mysql> SHOW TABLES;
+----+
| Tables in amazon |
+----+
emp |
+----+
1 row in set (0.00 sec)
UPDATE EMP
 SET FNAME='SQL'
 -> WHERE EID =2201;
ERROR 1142 (42000): UPDATE command denied to user 'pentagon'@'localhost' for table
'emp'
GRANT UPDATE ON EMP TO 'pentagon'@'localhost';
Query OK, 0 rows affected (0.01 sec)
UPDATE EMP
 -> SET FNAME='SQL'
 -> WHERE EID =2201;
Query OK, 1 row affected (0.00 sec)
Rows matched: 1 Changed: 1 Warnings: 0
DELETE FROM EMP WHERE FNMAE='SQL';
ERROR 1142 (42000): DELETE command denied to user 'pentagon'@'localhost' for table
'emp'
mysql>
TO GRANT ALL THE PERMISSION
GRANT ALL ON EMP TO 'pentagon'@'localhost';
Query OK, 0 rows affected (0.01 sec)
DELETE FROM EMP WHERE FNAME='SQL';
Query OK, 1 row affected (0.00 sec)
mysql> SELECT * FROM EMP;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
```

```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
12 rows in set (0.00 sec)
RFVOKE
REVOKE UPDATE ON EMP FROM 'pentagon'@'localhost';
Query OK, 0 rows affected (0.01 sec)
 set fname='sql'
 where eid=2201;
```

```
update emp
ERROR 1142 (42000): UPDATE command denied to user 'pentagon'@'localhost' for table
'emp'
DELETE FROM EMP WHERE FNAME='aman';
Query OK, 1 row affected (0.00 sec)
mysql> select * from emp;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
----+
```

```
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
32000.00 | 3600.00 | 112 | NULL |
---+
11 rows in set (0.00 sec)
REVOKE all ON EMP FROM 'pentagon'@'localhost';
Query OK, 0 rows affected (0.01 sec)
select * from emp;
ERROR 1142 (42000): SELECT command denied to user 'pentagon'@'localhost' for table
'emp'
use amazon;
ERROR 1044 (42000): Access denied for user 'pentagon'@'localhost' to database 'amazon'
```

## Drop the user

Drop user 'pentagon'@'localhost'; Query OK, 0 rows affected (0.01 sec)

### To check

```
+----+
4 rows in set (0.01 sec)
```

## Is it possible to create duplicate table?

```
Create table emp1(select * from emp);
Select * from emp1;
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
| 1801 | JAHNAVI | NAIK | 1996-04-11 | f | DISPATCHER | 1702 | 2020-02-15 |
450000.00 | 1000.00 | 110 | NULL |
| 1901 | SHIVANI | RAI | 1998-11-07 | f | TESTER | 2201 | 2019-12-12 | 450000.00 |
NULL | 113 | 502 |
| 1902 | ABHIJIT | GOWDA | 1997-12-25 | m | DISPATCHER | 1702 | 2019-02-28 |
50000.00 | NULL | 110 | 505 |
| 1903 | KARAN | BHAT | 1997-12-26 | m | SALESMAN | 1701 | 2019-12-26 |
45000.00 | NULL | 111 | 506 |
| 2001 | MURALI | KRISHNAN | 1998-06-08 | m | DISPATCHER | 2201 | 2020-03-15 |
45000.00 | 1000.00 | 110 | NULL |
| 2002 | DHARANI | PATIL | 1998-11-10 | f | DEVELOPER | 2001 | 2021-06-20 |
30000.00 | 3000.00 | 113 | NULL |
| 2101 | RASHMI | GONDA | 1995-10-03 | f | | SALESMAN | 1701 | 2021-01-02 |
45000.00 | 3000.00 | 111 | NULL |
| 2102 | FARIYA | TAJ | 1999-01-03 | f | DEVELOPER | 2001 | 2021-03-01 | 32000.00
| 3600.00 | 113 | NULL |
| 2103 | PRIYA | SHETTY | 1998-03-20 | f | ACCOUNTANT | 2001 | 2021-05-01 |
32000.00 | 3600.00 | 112 | NULL |
| 2104 | AMAN | RAI | 1998-08-15 | m | SALESMAN | 1701 | 2021-12-26 |
40000.00 | NULL | 111 | NULL |
| 2201 | KIRAN | RAJ | 1999-09-21 | m | ACCOUNTANT | NULL | 2022-08-28 |
30000.00 | 3600.00 | 115 | 503 |
13 rows in set (0.00 sec)
```

# Is it possible to create duplicate table without records?

Yes

Create table emp2 (select \* from emp where fname='rohit sharma');

Query OK, 0 rows affected (22.66 sec)vft6 Records: 0 Duplicates: 0 Warnings: 0

(table structure is different)

```
mysgl> desc emp2;
+----+
| Field | Type | Null | Key | Default | Extra |
+-----+
| FNAME | varchar(20) | NO | NULL | | |
| LNAME | varchar(20) | NO | NULL | |
| DOB | date | NO | NULL | |
| GENDER | enum('m','f','o') | NO | | NULL | |
| JOB | varchar(20) | NO | NULL | |
| NO | | NULL | |
DOJ date
| SAL | decimal(10,2) | NO | | NULL | |
COMM | decimal(10,2) | YES | NULL | |
| DNO | int | YES | NULL | |
| CID | int | YES | NULL | |
+----+
12 rows in set (0.03 sec)
mysql> select * from emp2;
Empty set (0.00 sec)
Is it prossible to add records from 1 table to another table?
(table structure should be same)
mysql> Insert into emp2(select * from emp where job='manager');
Query OK, 2 rows affected (0.01 sec)
Records: 2 Duplicates: 0 Warnings: 0
mysql> select * from emp2;
+----+
| EID | FNAME | LNAME | DOB | GENDER | JOB | MGR | DOJ | SAL |
COMM | DNO | CID |
| 1701 | RAHUL | MUKARJEE | 1991-02-19 | m | MANAGER | 1702 | 2017-04-17 |
100000.00 | NULL | 111 | NULL |
| 1702 | SAMEER | KHAN | 1995-04-20 | m | MANAGER | 2001 | 2017-07-07 |
90000.00 | NULL | 110 | NULL |
2 rows in set (0.00 sec)
Insert into emp2 (select * from dept where dname='marketing');
ERROR 1136 (21S01): Column count doesn't match value count at row 1
```

# Subtable

create table salesman\_data(select \* from emp job='salesman');