

# SQL COMMAND BY JP KHUNTIA

1. Create the database loans.
2. Use database loans.

```
C:\Program Files\MySQL\MySQL Server 5.1\bin\mysql.exe
Enter password: *****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 2
Server version: 5.1.71-community MySQL Community Server (GPL)

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owners.

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

mysql> create database loans;
Query OK, 1 row affected (0.00 sec)

mysql> show databases;
+-----+
| Database |
+-----+
| information_schema |
| jyoti |
| loans |
| mysql |
| test |
+-----+
5 rows in set (0.00 sec)

mysql> use loans;
Database changed
mysql>
```

1. Create table loan\_accounts and insert tuples in it.

```
mysql> create table loan_accounts
-> (accno integer,
-> cust_name varchar(30),
-> loan_amount decimal,
-> instalments integer,
-> int_rate decimal,
-> start_date date,
-> interest integer);
Query OK, 0 rows affected (0.17 sec)

mysql>
```

```
mysql> describe loan_accounts;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| accno | int(11) | YES | | NULL | |
| cust_name | varchar(30) | YES | | NULL | |
| loan_amount | decimal(10,0) | YES | | NULL | |
| instalments | int(11) | YES | | NULL | |
| int_rate | decimal(10,0) | YES | | NULL | |
| start_date | date | YES | | NULL | |
| interest | int(11) | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
7 rows in set (0.03 sec)

mysql>
```

```

mysql> insert into loan_accounts
-> values(1,"j.p khuntia",300000,36,12.00,"2009-07-19",null);
Query OK, 1 row affected (0.05 sec)

mysql> insert into loan_accounts
-> values(2,"s.p nayak",500000,48,10.00,"2008-03-22",null);
Query OK, 1 row affected (0.03 sec)

mysql> insert into loan_accounts values(3,"r.n khuntia",300000,36,11.00,"2007-03-08",null);
Query OK, 1 row affected (0.03 sec)

mysql> insert into loan_accounts values(4,"s.k nayak",800000,60,10.00,"2008-06-12",null);
Query OK, 1 row affected (0.03 sec)

mysql> insert into loan_accounts values(5,"t. nayak",200000,36,13.00,"2018-03-10",null);
Query OK, 1 row affected (0.05 sec)

mysql> insert into loan_accounts values(6,"j. nayak",700000,60,13.00,"2018-05-10",null);
Query OK, 1 row affected (0.08 sec)

mysql> insert into loan_accounts values(7,"j. khuntia",500000,48,null,"2008-05-03",null);
Query OK, 1 row affected (0.03 sec)

mysql>

```

Display details of all the loans.

```

mysql> select * from loan_accounts;
+-----+-----+-----+-----+-----+-----+-----+
| accno | cust_name | loan_amount | instalments | int_rate | start_date | inte |
rest |
+-----+-----+-----+-----+-----+-----+-----+
| 1 | j.p khuntia | 300000 | 36 | 12 | 2009-07-19 | |
NULL |
| 2 | s.p nayak | 500000 | 48 | 10 | 2008-03-22 | |
NULL |
| 3 | r.n khuntia | 300000 | 36 | 11 | 2007-03-08 | |
NULL |
| 4 | s.k nayak | 800000 | 60 | 10 | 2008-06-12 | |
NULL |
| 5 | t. nayak | 200000 | 36 | 13 | 2018-03-10 | |
NULL |
| 6 | j. nayak | 700000 | 60 | 13 | 2018-05-10 | |
NULL |
| 7 | j. khuntia | 500000 | 48 | NULL | 2008-05-03 | |
NULL |
+-----+-----+-----+-----+-----+-----+-----+
7 rows in set (0.00 sec)

```

Display the accno, cust\_name and loan\_amount of all the loans.

```

mysql> select accno,cust_name,loan_amount from loan_accounts;
+-----+-----+-----+
| accno | cust_name | loan_amount |
+-----+-----+-----+
| 1 | j.p khuntia | 300000 |
| 2 | s.p nayak | 500000 |
| 3 | r.n khuntia | 300000 |
| 4 | s.k nayak | 800000 |
| 5 | t. nayak | 200000 |
| 6 | j. nayak | 700000 |
| 7 | j. khuntia | 500000 |
+-----+-----+-----+
7 rows in set (0.00 sec)

```

Display details of all the loans with less than 40 installments

```
mysql> select * from loan_accounts
-> where instalments<40;
+-----+
| accno | cust_name   | loan_amount | instalments | int_rate | start_date | interest |
+-----+
| 1     | j.p khuntia | 300000     | 36         | 12      | 2009-07-19 | NULL     |
| 3     | r.n khuntia | 300000     | 36         | 11      | 2007-03-08 | NULL     |
| 5     | t. nayak   | 200000     | 36         | 13      | 2018-03-10 | NULL     |
+-----+
```

3 rows in set (0.03 sec)

Display the accno and loan\_amount of all the loans started before 01-04-2009.

```
mysql> select accno,loan_amount from loan_accounts where start_date<"2009-04-01"
;
+-----+
| accno | loan_amount |
+-----+
| 2     | 500000     |
| 3     | 300000     |
| 4     | 800000     |
| 7     | 500000     |
+-----+
```

4 rows in set (0.00 sec)

Display the int\_rate of all the loans started after 01-04-2009.

```
mysql> select int_rate from loan_accounts
-> where start_date>"2009-04-01";
+-----+
| int_rate |
+-----+
| 12      |
| 13      |
| 13      |
+-----+
```

3 rows in set (0.00 sec)

Display the details of all the loans whose rate of interest is null.

```
mysql> select * from loan_accounts where int_rate is null;
+-----+
| accno | cust_name   | loan_amount | instalments | int_rate | start_date | interest |
+-----+
| 7     | j. khuntia | 500000     | 48         | NULL    | 2008-05-03 | NULL     |
+-----+
```

1 row in set (0.00 sec)

```
mysql>
```

Display the amount of various loans from the table loan\_accounts. A loan amount should appear only once.

```
mysql> select distinct loan_amount
-> from loan_accounts;
+-----+
| loan_amount |
+-----+
| 3000000    |
| 5000000    |
| 8000000    |
| 2000000    |
| 7000000    |
+-----+
5 rows in set (0.05 sec)

mysql>
```

Display the cust\_name and loan\_amount for all the loans which do not have number of installments 36.

```
mysql> select cust_name, loan_amount
-> from loan_accounts
-> where not instalments=36;
+-----+-----+
| cust_name | loan_amount |
+-----+-----+
| s.p nayak | 5000000    |
| s.k nayak | 8000000    |
| j. nayak  | 7000000    |
| j. khuntia | 5000000    |
+-----+-----+
4 rows in set (0.00 sec)
```

Display the cust\_name and loan\_amount for all the loans for which the loan amount is less than 500000 or int\_rate is more than 12.

```
mysql> select cust_name, loan_amount
-> from loan_accounts
-> where loan_amount<500000 or int_rate>12;
+-----+-----+
| cust_name | loan_amount |
+-----+-----+
| j.p khuntia | 3000000    |
| r.n khuntia | 3000000    |
| t. nayak    | 2000000    |
| j. nayak    | 7000000    |
+-----+-----+
4 rows in set (0.02 sec)
```

Display the details of all the loans whose rate of interest is in the range 11% to 12%.

```
mysql> select * from loan_accounts
-> where int_rate>=11
-> and int_rate<=12;
+-----+-----+-----+-----+-----+-----+-----+
| accno | cust_name | loan_amount | instalments | int_rate | start_date | interest |
+-----+-----+-----+-----+-----+-----+-----+
| 1     | j.p khuntia | 3000000    | 36         | 12      | 2009-07-19 | NULL     |
| 3     | r.n khuntia | 3000000    | 36         | 11      | 2007-03-08 | NULL     |
+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

Display the cust\_name and loan\_amount for all the loans for which the number of installments are 24, 36, or 48.

```
mysql> select cust_name, loan_amount
-> from loan_accounts
-> where instalments in(24,36,48);
+-----+-----+
| cust_name | loan_amount |
+-----+-----+
| j.p khuntia | 300000 |
| s.p nayak | 500000 |
| r.n khuntia | 300000 |
| t. nayak | 200000 |
| j. khuntia | 500000 |
+-----+-----+
5 rows in set (0.00 sec)
```

Display the details of all the loans whose loan\_amount is in the range 400000 to 500000.

```
mysql> select * from loan_accounts
-> where loan_amount between 400000 and 500000;
+-----+-----+-----+-----+-----+-----+-----+
| accno | cust_name | loan_amount | instalments | int_rate | start_date | interest |
+-----+-----+-----+-----+-----+-----+-----+
| 2 | s.p nayak | 500000 | 48 | 10 | 2008-03-22 | N |
| 7 | j. khuntia | 500000 | 48 | NULL | 2008-05-03 | N |
+-----+-----+-----+-----+-----+-----+-----+
2 rows in set (0.02 sec)
```

Display the accno, cust\_name, loan\_amount for all the loans for which the cust\_name ends with "khuntia".

```
mysql> select accno, cust_name, loan_amount
-> from loan_accounts
-> where cust_name like "%khuntia";
+-----+-----+-----+
| accno | cust_name | loan_amount |
+-----+-----+-----+
| 1 | j.p khuntia | 300000 |
| 3 | r.n khuntia | 300000 |
| 7 | j. khuntia | 500000 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

Display the accno, cust\_name, and loan\_amount for all the loans for which the cust\_name contains 'i' as the second last character.

```
mysql> select accno, cust_name, loan_amount
-> from loan_accounts
-> where cust_name like "%i_";
+-----+-----+-----+
| accno | cust_name | loan_amount |
+-----+-----+-----+
| 1 | j.p khuntia | 300000 |
| 3 | r.n khuntia | 300000 |
| 7 | j. khuntia | 500000 |
+-----+-----+-----+
3 rows in set (0.00 sec)
```

Display the details of all the loans in the ascending order of their loan\_amount.

```
mysql> select * from loan_accounts
-> order by loan_amount;
+-----+
| accno | cust_name   | loan_amount | instalments | int_rate | start_date | inte
rest |
+-----+
| 5     | t. nayak   | 200000     | 36          | 13       | 2018-03-10 |
NULL |
| 1     | j.p khuntia | 300000     | 36          | 12       | 2009-07-19 |
NULL |
| 3     | r.n khuntia | 300000     | 36          | 11       | 2007-03-08 |
NULL |
| 2     | s.p nayak  | 500000     | 48          | 10       | 2008-03-22 |
NULL |
| 7     | j. khuntia | 500000     | 48          | NULL     | 2008-05-03 |
NULL |
| 6     | j. nayak   | 700000     | 60          | 13       | 2018-05-10 |
NULL |
| 4     | s.k nayak  | 800000     | 60          | 10       | 2008-06-12 |
NULL |
+-----+
7 rows in set (0.06 sec)
```

Display the details of all the loans in the descending order of their start\_date.

```
mysql> select * from loan_accounts
-> order by start_date desc;
+-----+
| accno | cust_name   | loan_amount | instalments | int_rate | start_date | inte
rest |
+-----+
| 6     | j. nayak   | 700000     | 60          | 13       | 2018-05-10 |
NULL |
| 5     | t. nayak   | 200000     | 36          | 13       | 2018-03-10 |
NULL |
| 1     | j.p khuntia | 300000     | 36          | 12       | 2009-07-19 |
NULL |
| 4     | s.k nayak  | 800000     | 60          | 10       | 2008-06-12 |
NULL |
| 7     | j. khuntia | 500000     | 48          | NULL     | 2008-05-03 |
NULL |
| 2     | s.p nayak  | 500000     | 48          | 10       | 2008-03-22 |
NULL |
| 3     | r.n khuntia | 300000     | 36          | 11       | 2007-03-08 |
NULL |
+-----+
7 rows in set (0.00 sec)
```

Put the interest rate 11.50% for all the loans for which interest rate is null.

```
mysql> update loan_accounts
-> set int_rate=11.50
-> where int_rate is null;
Query OK, 1 row affected, 1 warning (0.22 sec)
Rows matched: 1 Changed: 1 Warnings: 1
```

For each loan replace interest with  $(\text{loan\_amount} * \text{int\_rate} * \text{instalments}) / 12 * 100$ .

```
mysql> update loan_accounts
-> set interest=(loan_amount * int_rate * instalments)/(12*100);
Query OK, 7 rows affected (0.13 sec)
Rows matched: 7 Changed: 7 Warnings: 0
```

Delete the records of all the loans of "j.khuntia".

```
mysql> delete from loan_accounts
-> where cust_name="j. khuntia";
Query OK, 1 row affected (0.05 sec)
```

Add another category of type char(1) in the loan\_accounts table.

```
mysql> alter table loan_accounts
-> add category char(1);
Query OK, 6 rows affected (0.33 sec)
Records: 6 Duplicates: 0 Warnings: 0
```

Select cust\_name , length(cust\_name), lcase(cust\_name),

Ucase(cust\_name) from loan\_accounts where int\_rate <11.00;

```
mysql> select cust_name,length(cust_name),lcase(cust_name),ucase(cust_name) from
loan_accounts where int_rate<11.00;
+-----+-----+-----+-----+
| cust_name | length(cust_name) | lcase(cust_name) | ucase(cust_name) |
+-----+-----+-----+-----+
| s.p nayak | 9 | s.p nayak | S.P NAYAK |
| s.k nayak | 9 | s.k nayak | S.K NAYAK |
+-----+-----+-----+-----+
2 rows in set (0.03 sec)
```

Select dayname(start\_date) from loan\_accounts;

```
mysql> select dayname(start_date)from loan_accounts;
+-----+
| dayname(start_date) |
+-----+
| Sunday |
| Saturday |
| Thursday |
| Thursday |
| Saturday |
| Thursday |
+-----+
6 rows in set (0.00 sec)
```

Select round(int\_rate\*110/100,2) from loan\_accounts where int\_rate >10;

```
mysql> select round(int_rate*110/100,2)from loan_accounts where int_rate>10;
+-----+
| round(int_rate*110/100,2) |
+-----+
| 13.20 |
| 12.10 |
| 14.30 |
| 14.30 |
+-----+
4 rows in set (0.03 sec)
```

Select pow(4,3), pow(3,4);

```
mysql> select pow(4,3),pow(3,4);
+-----+-----+
| pow(4,3) | pow(3,4) |
+-----+-----+
| 64 | 81 |
+-----+-----+
1 row in set (0.05 sec)
```

Select round(543.5694,2) , round(543.5694), round(543.5634,-1);

```
mysql> select round(543.5694,2),round(543.5694),round(543.5694,-1);
+-----+-----+-----+
| round(543.5694,2) | round(543.5694) | round(543.5694,-1) |
+-----+-----+-----+
|          543.57 |          544 |          540 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

Select truncate(543.5694,2), truncate(543.5694,-1);

```
mysql> select truncate(543.5694,2),truncate(543.5694,-1);
+-----+-----+
| truncate(543.5694,2) | truncate(543.5694,-1) |
+-----+-----+
|          543.56 |          540 |
+-----+-----+
1 row in set (0.00 sec)
```

Select concat("jyoti", " prakash") "full name";

```
mysql> select concat("jyoti","prakash")"full name";
+-----+
| full name |
+-----+
| jyotiprakash |
+-----+
1 row in set (0.02 sec)
```

Select year(curdate()), month(curdate()), day(curdate());

```
mysql> select year(curdate()),month(curdate()),day(curdate());
+-----+-----+-----+
| year(curdate()) | month(curdate()) | day(curdate()) |
+-----+-----+-----+
|          2018 |          4 |          17 |
+-----+-----+-----+
1 row in set (0.00 sec)
```

Select mid("information",3,4),substr("technology",3);

```
mysql> select mid("information",3,4),substr("technology",3);
+-----+-----+
| mid("information",3,4) | substr("technology",3) |
+-----+-----+
| form | chnology |
+-----+-----+
1 row in set (0.00 sec)
```