```
mysql> insert into branch values(1234,'Butwal',2000000);
Query OK, 1 row affected (0.03 sec)
mysql>
           insert into branch values(5678, 'Milanchowk', 6500000);
Query OK, 1 row affected (0.02 sec)
          insert into branch values(9101, 'Harichowk', 5200000);
mysql>
Query OK, 1 row affected (0.02 sec)
         insert into branch values(1213,'Pokhara', 490000);
mysql>
Query OK, 1 row affected (0.02 sec)
          insert into branch values(1415, 'Bagar', 200000);
mvsal>
Query OK, 1 row affected (0.02 sec)
mysql>
          insert into branch values(1617, 'Kathmandu', 5000000);
Query OK, 1 row affected (0.02 sec)
          insert into branch values(1819, 'Pulchowk', 1500000);
mysql>
Query OK, 1 row affected (0.02 sec)
          insert into branch values(2021, 'Baneshwor', 8000000);
mysql>
Query OK, 1 row affected (0.03 sec)
          insert into branch values(2223, 'Bhairahawa', 250000);
mysql>
Ouery OK, 1 row affected (0.02 sec)
mvsal>
          insert into branch values(2425, 'Palpa', 650000);
Query OK, 1 row affected (0.02 sec)
           insert into customer values('Sandesh Bashyal', 'Siddhartha Tol',
mysql>
'Butwal'):
Query OK, 1 row affected (0.02 sec)
           insert into customer values('Prashant Baral','Mankamana Tol','B
mysql>
ardaghat');
Query OK, 1 row affected (0.02 sec)
mysql>
          insert into customer values('Prakanda Shrestha','Prithivi marg'
.'Golpark'):
Query OK, 1 row affected (0.03 sec)
          insert into customer values('Martine Wauben','Lumbini Road','Bh
mysql>
airahawa');
Query OK, 1 row affected (0.02 sec)
           insert into customer values('Jack Smith','Shukkanagar','Bhaktap
mysql>
ur');
Query OK, 1 row affected (0.03 sec)
          insert into customer values('Mark Tedd','Chabel','Kathmandu');
mysql>
Query OK, 1 row affected (0.02 sec)
           insert into customer values('Sams Raja', 'Srijana Chowk', 'Pokhar
mysql>
a');
Query OK, 1 row affected (0.03 sec)
mysql>
           insert into customer values('Sudip Tiwari', 'Pulchowk', 'Lalitpur
 );
Query OK, 1 row affected (0.02 sec)
           insert into customer values('Bibek Sapkota','Hallanchowk','Pokh
mysql>
ara');
Query OK, 1 row affected (0.02 sec)
           insert into customer values('Sarah Rani','Bharatpur Marg','Nara
mysql>
yanghat');
```

Query OK, 1 row affected (0.02 sec)

```
mysql> insert into account values(112987456,1234,30000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into account values(112874563,5678,45000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into account values(112745632,9101,80000);
Query OK, 1 row affected (0.03 sec)
mysql> insert into account values(112456321,1213,60000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into account values(112563210,1415,78000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into account values(112632109,1617,20000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into account values(112321098,1819,15000);
Ouery OK, 1 row affected (0.02 sec)
mysql> insert into account values(112210987,2021,16000);
Query OK, 1 row affected (0.03 sec)
mysql> insert into account values(112109876,2223,300000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into account values(112098765,2425,111000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into loan values(056743215,1234,100000);
Query OK, 1 row affected (0.02 sec)
mysgl> insert into loan values(765286123.5678.20000);
Query OK, 1 row affected (0.03 sec)
mysql> insert into loan values(101923573,9101,200000);
Query OK, 1 row affected (0.03 sec)
mysql> insert into loan values(120124042,1213,500000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into loan values(792639946,1415,65000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into loan values(237634995,1617,70000);
Query OK, 1 row affected (0.02 sec)
mysql> insert into loan values(825394514,1819,400000);
Query OK, 1 row affected (0.03 sec)
mysql> insert into loan values(927347552,2021,230000);
Query OK, 1 row affected (0.01 sec)
mysql> insert into loan values(098623431,2223,105000);
Query OK, 1 row affected (0.01 sec)
```

Here bank name is changed from number to names using syntax, and is shown in tables: update loan set branch\_name = 'Bhaktapur' where loan\_number = 927347552; update account set branch\_name = 'Tinkune' where account\_number = 112098765;

mysql> insert into loan values(029346992,2425,1500000);

Query OK, 1 row affected (0.03 sec)

```
mysql> insert into borrower values('Bibek Sapkota', 056743215);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Jack Smith', 765286123);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Mark Tedd', 101923573);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Martine Wauben', 029346992);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Prakanda Shrestha', 927347552);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Prashant Baral', 792639946);
Query OK, 1 row affected (0.03 sec)
mysql> insert into borrower values('Sams Raja', 792639946);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Sandesh Bashyal', 237634995);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Sarah Rani', 825394514);
Query OK, 1 row affected (0.02 sec)
mysql> insert into borrower values('Sudip Tiwari', 098623431);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> insert into depositor values('Bibek Sapkota',112987456);
Query OK, 1 row affected (0.02 sec)
mysql> insert into depositor values('Jack Smith',112874563);
Query OK, 1 row affected (0.02 sec)
mysql> insert into depositor values('Mark Tedd',112745632);
Query OK, 1 row affected (0.03 sec)
mysql> insert into depositor values('Martine Wauben',112456321);
Query OK, 1 row affected (0.03 sec)
mysql> insert into depositor values('Prakanda Shrestha',112563210
Query OK, 1 row affected (0.02 sec)
mysql> insert into depositor values('Prashant Baral',112632109);
Query OK, 1 row affected (0.02 sec)
mysql> insert into depositor values('Sams Raja',112321098);
Query OK, 1 row affected (0.02 sec)
mysql> insert into depositor values('Sandesh Bashyal',112210987)
Query OK, 1 row affected (0.03 sec)
mysql> insert into depositor values('Sarah Rani',112109876);
Query OK, 1 row affected (0.02 sec)
mysql> insert into depositor values('Sudip Tiwari',112098765);
Query OK, 1 row affected (0.02 sec)
```

```
mysql> select * from branch;
 branch_number | branch_city | assests |
         1213 | Pokhara
                           490000
         1234 | Butwal
                           2000000
                           200000
         1415 | Bagar
                           5000000
         1617 | Kathmandu
         1819 | Pulchowk
                           1500000
         2021 | Baneshwor
                           8000000
         2223 | Bhairahawa | 250000
         2425 | Palpa
                           650000
         5678 | Milanchowk | 6500000
         9101 | Harichowk
                           5200000
10 rows in set (0.00 sec)
```

3.

```
mysql> select * from customer
    -> ;
 customer name
                    | customer street | customer city
 Bibek Sapkota
                   | Hallanchowk
                                      I Pokhara
 Jack Smith
                   | Shukkanagar
                                     | Bhaktapur
 Mark Tedd
                   I Chabel
                                     | Kathmandu
                                     | Bhairahawa
 Martine Wauben
                   | Lumbini Road
 Prakanda Shrestha | Prithivi marg
                                     | Golpark
 Prashant Baral
                  | Mankamana Tol
                                     | Bardaghat
 Sams Raja
                   | Srijana Chowk
                                     | Pokhara
 Sandesh Bashyal
                   | Siddhartha Tol
                                      | Butwal
 Sarah Rani
                   | Bharatpur Marg
                                      | Narayanghat
 Sudip Tiwari
                   | Pulchowk
                                      | Lalitpur
10 rows in set (0.00 sec)
```

```
mysql> select * from loan;
 loan_number | branch_name | amount
     29346992 | Tinkune
                             1500000
    56743215 | Butwal
                              100000
    98623431 | Washigton
                               105000
    101923573 | Chauraha
                               200000
    120124042 | Kathmandu
                               500000
    237634995 | Pokhara
                               70000
    765286123 | Zero
                               20000
    792639946 | Lalitpur
                               65000
    825394514 | Pulchowk
                               400000
    927347552 | Bhaktapur
                               230000
10 rows in set (0.00 sec)
```

```
mysql> select * from borrower;
                  | loan_number
 customer_name
 Martine Wauben
                      29346992
 Bibek Sapkota
                      56743215
 Sudip Tiwari
                      98623431
 Mark Tedd
                     101923573
 Sandesh Bashyal
                     237634995
 Jack Smith
                     765286123
 Prashant Baral
                     792639946
 Sams Raja
                     792639946
 Sarah Rani
                      825394514
 Prakanda Shrestha |
                   927347552 |
10 rows in set (0.00 sec)
```

6.

```
mysql> select * from account;
 account_number | branch_name | balance
       112098765 | Tinkune
                                  111000
       112109876 | Butwal
                                  300000
      112210987 | Washigton
                                  16000
      112321098 | Chauraha
                                   15000
      112456321 | Kathmandu
                                   60000
      112563210 | Pokhara
                                   78000
       112632109 | Zero
                                   20000
      112745632 | Lalitpur
                                  80000
       112874563 | Pulchowk
                                  45000
       112987456 | Bhaktapur
                                  30000
10 rows in set (0.01 sec)
```

```
mysql> select distinct * from loan;
 loan_number | branch_name | amount
    29346992 | Tinkune
                          1500000
    56743215 | Butwal
                          100000
    98623431 | Washigton
                            105000
   101923573 | Chauraha
                          200000
   120124042 | Kathmandu
                          500000
   237634995 | Pokhara
                            70000
   765286123 | Zero
                            20000
   792639946 | Lalitpur
                            65000
   825394514 | Pulchowk
                           400000
   927347552 | Bhaktapur | 230000
10 rows in set (0.00 sec)
```

```
mysql> select loan_number from loan where amount >= 50000 and amount <= 10
00000;
+-----+
| loan_number |
+-----+
| 56743215 |
| 98623431 |
| 101923573 |
| 120124042 |
| 237634995 |
| 792639946 |
| 825394514 |
| 927347552 |
+------+
8 rows in set (0.00 sec)</pre>
```

12.

```
mysql> select l.loan_number, b.customer_name, l.amount from loan as l, bor rower as b where l.loan_number = b.loan_number and l.branch_name = 'Tinkun e';
+------+
| loan_number | customer_name | amount |
+-----+
| 29346992 | Martine Wauben | 1500000 |
+-----+
1 row in set (0.00 sec)
```

13.

```
mysql> select branch_city,assets from branch where assets > some (select a
ssets from branch where branch_city='Baneshwor');
Empty set (0.00 sec)
```

14.

```
mysql> select customer_name from customer where customer_street like '%mai
n%';
Empty set (0.00 sec)
```

```
16.
```

18.

```
mysql> (select d.customer_name, a.account_number from depositor as d, account as a
    -> where d.account_number = a.account_number)
    -> (select b.customer_name, l.loan_number from borrower as b, loan as l
    -> where b.loan_number = l.loan_number);
| customer_name | account_number |
  -----

    Sudip Tiwari
    112098765

    Sarah Rani
    112109876

    Sandesh Bashyal
    112210987

                           112321098
 Sams Raja
 Martine Wauben |
Prakanda Shrestha |
                           112456321
112563210
112632109
                                             I
 Prashant Baral |
                            112745632
 Mark Tedd
 Jack Smith
                            112874563
 Bibek Sapkota
                           112987456
                            29346992
 Martine Wauben
                            56743215
 Bibek Sapkota
  Sudip Tiwari
                             98623431
 Mark Tedd
                            101923573
 Sandesh Bashyal
                             237634995
 Jack Smith
                            765286123
 Prashant Baral
                            792639946
 Sams Raja
                            792639946
 Sarah Rani
Prakanda Shrestha |
                            825394514
                            927347552
20 rows in set (0.02 sec)
```

```
20.
```

```
mysql> select customer_name from depositor where customer_name not in (select customer_name from borrower);
Empty set (0.00 sec)
```

22.

```
mysql> select balance from account order by balance desc limit 1;
+------+
| balance |
+-----+
| 300000 |
+-----+
1 row in set (0.00 sec)
```

23.

24.

```
mysql> select count(*) from customer;
+-----+
| count(*) |
+-----+
| 10 |
+-----+
1 row in set (0.04 sec)
```

```
26.
```

28.

```
mysql> select branch_name from account group by branch_name having avg(balance)>5000;
+-----+
| branch_name |
+-----+
| Tinkune |
| Butwal |
| Washigton |
| Chauraha |
| Kathmandu |
| Pokhara |
| Zero |
| Lalitpur |
| Pulchowk |
| Bhaktapur |
| Tows in set (0.00 sec)
```

```
30.
```

mysql> select new\_tb.customer\_name from (select customer\_name, count(customer\_ \_city) as count\_city from customer where customer\_city = "Bharatpur" group by customer\_name) as new\_tb where new\_tb.count\_city = 3;
Empty set (0.00 sec)

31.

mysql> select a.account\_number, d.customer\_name from account as a, depositor as d
where a.branch\_name = "Pokhara" and a.account\_number = d.account\_number intersect
 select l.loan\_number as loan\_num, b.customer\_name from loan as l, borrower as
b where l.branch\_name = "Kathmandu" and l.loan\_number = b.loan\_number;
Empty set (0.00 sec)

32.

33.

```
35.
```

```
mysql> select max(balance), sum(balance), branch_name from account group by
branch_name;
  max(balance) | sum(balance) | branch_name |
         111000 |
                        111000 | Tinkune
300000 | Butwal
         300000
                          16000 | Butwat

16000 | Washigton

15000 | Chauraha

60000 | Kathmandu

78000 | Pokhara

20000 | Zero

80000 | Lalitpur

45000 | Pulchowk
         16000
                                                                    I
         15000 |
          60000
          78000 |
          20000
          80000
          45000
                    30000 | Bhaktapur
          30000
    -----+
```

37.

```
39.
```

```
mysql> DELETE FROM depositor WHERE account_number IN (SELECT account_number
FROM account WHERE branch_name = "Kathmandu");
Query OK, 1 row affected (0.03 sec)

mysql> DELETE FROM account WHERE branch_name = "Kathmandu";
Query OK, 1 row affected (0.04 sec)
```

41.

```
mysql> DELETE FROM borrower WHERE loan_number IN (SELECT loan_number FROM lo
an WHERE amount BETWEEN 13000 AND 150000);
Query OK, 6 rows affected (0.03 sec)
```

42.

```
mysql> delete from account where branch_name = "Baneshwor";
Query OK, 0 rows affected (0.00 sec)
```

43.

```
mysql> update account set balance = balance * 1.05;

Query OK, 4 rows affected (0.02 sec)

Rows matched: 4 Changed: 4 Warnings: 0

47.

mysql> update account set balance= case when balance>1000 then balance *1.06

else balance * 1.05 end;

Query OK, 4 rows affected (0.02 sec)

Rows matched: 4 Changed: 4 Warnings: 0
```

## 48, 49, 50.

```
mysql> create view all_customer as select d.customer_name, a.branch_name fro
m account as a, depositor as d where a.account_number = d.account_number;
Query OK, 0 rows affected (0.03 sec)
mysql> select * from all_customer;
| customer_name | branch_name |
+-----
| Prashant Baral | Zero
| Mark Tedd | Lalitpur
| Jack Smith | Pulchowk
| Bibek Sapkota | Bhaktapur
10 rows in set (0.01 sec)
mysql> drop view all customer;
Query OK, 0 rows affected (0.03 sec)
```

```
mysql> select * from borrower as b left join customer as c on b.customer_name = c.customer_name;
Martine Wauben | 29346992 | Martine Wauben | Lumbini Road | Bhairahawa Bibek Sapkota | 56743215 | Bibek Sapkota | Hallanchowk | Pokhara Sudip Tiwari | Pulchowk | Lalitpur Mark Tedd | Chabel | Kathmandu Sandesh Bashyal | 237634995 | Sandesh Bashyal | Siddhartha Tol | Butwal Jack Smith | 765286123 | Jack Smith | Shukkanagar | Bhaktapur Prashant Baral | 792639946 | Prashant Baral | Mankamana Tol | Bardaghat Sams Raja | 792639946 | Sams Raja | Srijana Chowk | Pokhara Sarah Rani | 825394514 | Sarah Rani | Bharatpur Marg | Narayanghat Prakanda Shreetha | 927347552 | Prakanda Shreetha | Prithivi marg | Golpark
  Prakanda Shrestha | 927347552 | Prakanda Shrestha | Prithivi marg
                                                                                                                                                          | Golpark
10 rows in set (0.00 sec)
```