SQL Part 1:

Jai Phookan
Fw17_0738

1. Create the following table according to the following information

```
mysql> create table deposit(actno varchar(25),cname varchar(20),bname varchar(20),amount int,adate date);
Query OK, 0 rows affected (0.10 sec)

mysql> create table branch(bname varchar(20),city varchar(20));
Query OK, 0 rows affected (0.05 sec)

mysql> create table customer(cname varchar(20),city varchar(20));
Query OK, 0 rows affected (0.05 sec)

mysql> create table borrow(loanno varchar(20),cname varchar(20),bname varchar(20),amount int);
Query OK, 0 rows affected (0.06 sec)
```

2. Describe the tables which are already created.

```
mysql> desc deposit;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| actno  | varchar(25) | YES  |     | NULL    |       |
| cname  | varchar(20) | YES  |     | NULL    |       |
| bname  | varchar(20) | YES  |     | NULL    |       |
| amount | int(11)     | YES  |     | NULL    |       |
| adate  | date        | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
5 rows in set (0.00 sec)

mysql> desc branch;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| bname | varchar(20) | YES  |     | NULL    |       |
| city  | varchar(20) | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)
```

```
mysql> desc customer;
+-------+-------------+------+-----+---------+-------+
| Field | Type        | Null | Key | Default | Extra |
+-------+-------------+------+-----+---------+-------+
| cname | varchar(20) | YES  |     | NULL    |       |
| city  | varchar(20) | YES  |     | NULL    |       |
+-------+-------------+------+-----+---------+-------+
2 rows in set (0.00 sec)

mysql> desc borrow;
+--------+-------------+------+-----+---------+-------+
| Field  | Type        | Null | Key | Default | Extra |
+--------+-------------+------+-----+---------+-------+
| loanno | varchar(20) | YES  |     | NULL    |       |
| cname  | varchar(20) | YES  |     | NULL    |       |
| bname  | varchar(20) | YES  |     | NULL    |       |
| amount | int(11)     | YES  |     | NULL    |       |
+--------+-------------+------+-----+---------+-------+
4 rows in set (0.00 sec)
```

3. Insert the data as for the following:

```
mysql> insert into deposit values(101,"sunil","mgroad",5000,"1996-04-01");
Query OK, 1 row affected (0.01 sec)

mysql> insert into deposit values(102,"rahul","karolbagh",3500,"1995-11-17");
Query OK, 1 row affected (0.19 sec)

mysql> insert into deposit values(103,"madhuri","chandni",1200,"1995-12-17");
Query OK, 1 row affected (0.01 sec)

mysql> insert into deposit values(104,"pramod","mgroad",3000,"1996-03-27");
Query OK, 1 row affected (0.01 sec)

mysql> insert into deposit values(105,"sandip","mgroad",2000,"1996-03-31");
Query OK, 1 row affected (0.01 sec)

mysql> insert into branch values("vrce","nagpur");
Query OK, 1 row affected (0.02 sec)

mysql> insert into branch values("karolbagh","delhi");
Query OK, 1 row affected (0.01 sec)
```

```
mysql> insert into branch values("chandni","delhi");
Query OK, 1 row affected (0.01 sec)

mysql> insert into branch values("mgroad","bangalore");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer values("anil","calcuta");
Query OK, 1 row affected (0.02 sec)

mysql> insert into customer values("rahul","baroda");
Query OK, 1 row affected (0.02 sec)

mysql> insert into customer values("madhuri","nagpur");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer values("pramod","nagpur");
Query OK, 1 row affected (0.01 sec)

mysql> insert into customer values("sunil","delhi");
Query OK, 1 row affected (0.02 sec)

mysql> insert into borrow values(201,"anil","vrce",1000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into borrow values(206,"rahul","karolbagh",5000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into borrow values(311,"sunil","mgroad",3000);
Query OK, 1 row affected (0.19 sec)

mysql> insert into borrow values(321,"madhuri","chandni",2000);
Query OK, 1 row affected (0.01 sec)

mysql> insert into borrow values(375,"pramod","mgroad",8000);
Query OK, 1 row affected (0.01 sec)
```

4. Retrieve all the records from the table BORROW where amount in between 2000 and 3000.

```
mysql> select * from borrow where amount>=2000 and amount<=3000;
+--------+---------+---------+--------+
| loanno | cname   | bname   | amount |
+--------+---------+---------+--------+
| 311    | sunil   | mgroad  |   3000 |
| 321    | madhuri | chandni |   2000 |
```

```
+--------+---------+---------+--------+
2 rows in set (0.00 sec)
```

5. Retrieve the details from the table DEPOSIT mysql> select * from deposit;

```
+-------+---------+-----------+--------+------------+
| actno | cname   | bname     | amount | adate      |
+-------+---------+-----------+--------+------------+
| 100   | anil    | vrce      |   1000 | 1995-03-01 |
| 101   | sunil   | mgroad    |   5000 | 1996-04-01 |
| 102   | rahul   | karolbagh |   3500 | 1995-11-17 |
| 103   | madhuri | chandni   |   1200 | 1995-12-17 |
| 104   | pramod  | mgroad    |   3000 | 1996-03-27 |
| 105   | sandip  | mgroad    |   2000 | 1996-03-31 |
+-------+---------+-----------+--------+------------+
6 rows in set (0.01 sec)
```

6. Retrieve the customer name, account no of DEPOSIT.

```
mysql> select actno,cname from deposit;
+-------+---------+
| actno | cname   |
+-------+---------+
| 100   | anil    |
| 101   | sunil   |
| 102   | rahul   |
| 103   | madhuri |
| 104   | pramod  |
| 105   | sandip  |
+-------+---------+
6 rows in set (0.00 sec)
```

7. Retrieve the name of the customer living in NAGPUR.

```
mysql> select * from customer where city="nagpur";
+---------+--------+
| cname   | city   |
+---------+--------+
| madhuri | nagpur |
| pramod  | nagpur |
+---------+--------+
2 rows in set (0.01 sec)
```

8. Retrieve the name of the customers who opened account after 17-NOV-95.

```
mysql> select cname from deposit where adate>"1995-11-17";
+---------+
```

```
| cname   |
+---------+
| sunil   |
| madhuri |
| pramod  |
| sandip  |
+---------+
4 rows in set (0.00 sec)
```

9. Retrieve the account number and amount of the customer having account opened between 01-12-95 and 01-06.96.

```
mysql> select actno,amount from deposit where adate>"1995-12-01" and adate<"1996-06-01";
+-------+--------+
| actno | amount |
+-------+--------+
| 101   |   5000 |
| 103   |   1200 |
| 104   |   3000 |
| 105   |   2000 |
+-------+--------+
4 rows in set (0.00 sec)
```

10. Retrieve all the records from the table DEPOSIT where CNAME begins with C.

```
mysql>  SELECT * FROM deposit  WHERE cNAME LIKE "s%" ;
+-------+--------+--------+--------+------------+
| actno | cname  | bname  | amount | adate      |
+-------+--------+--------+--------+------------+
| 101   | sunil  | mgroad |   5000 | 1996-04-01 |
| 105   | sandip | mgroad |   2000 | 1996-03-31 |
+-------+--------+--------+--------+------------+
2 rows in set (0.00 sec)
```

11. Retrieve all the records from the table BORROW where 2nd character of CNAME is U.

```
mysql>  SELECT * FROM deposit  WHERE cNAME LIKE "_u%" ;
+-------+-------+--------+--------+------------+
| actno | cname | bname  | amount | adate      |
+-------+-------+--------+--------+------------+
| 101   | sunil | mgroad |   5000 | 1996-04-01 |
+-------+-------+--------+--------+------------+
1 row in set (0.00 sec)
```

12. Retrieve all the records from the table DEPOSIT where branch name is CHANDNI or MGROAD.

```
mysql> select * from deposit where bname="chandni" or bname="mgroad";
+-------+---------+---------+--------+------------+
| actno | cname   | bname   | amount | adate      |
+-------+---------+---------+--------+------------+
| 101   | sunil   | mgroad  |   5000 | 1996-04-01 |
| 103   | madhuri | chandni |   1200 | 1995-12-17 |
| 104   | pramod  | mgroad  |   3000 | 1996-03-27 |
| 105   | sandip  | mgroad  |   2000 | 1996-03-31 |
+-------+---------+---------+--------+------------+
4 rows in set (0.00 sec)
```

13. Retrieve all the records from the table DEPOSIT where branch name is not CHANDNI or MGROAD.

```
mysql> select * from deposit where bname!="chandni" and bname!="mgroad";
+-------+-------+-----------+--------+------------+
| actno | cname | bname     | amount | adate      |
+-------+-------+-----------+--------+------------+
| 100   | anil  | vrce      |   1000 | 1995-03-01 |
| 102   | rahul | karolbagh |   3500 | 1995-11-17 |
+-------+-------+-----------+--------+------------+
2 rows in set (0.00 sec)
```

14. Retrieve all the records from DEPOSIT where amount > 1000 and arrange the customer name in ascending order.

```
mysql> select * from deposit where amount>1000 order by cname;
+-------+---------+-----------+--------+------------+
| actno | cname   | bname     | amount | adate      |
+-------+---------+-----------+--------+------------+
| 103   | madhuri | chandni   |   1200 | 1995-12-17 |
| 104   | pramod  | mgroad    |   3000 | 1996-03-27 |
| 102   | rahul   | karolbagh |   3500 | 1995-11-17 |
| 105   | sandip  | mgroad    |   2000 | 1996-03-31 |
| 101   | sunil   | mgroad    |   5000 | 1996-04-01 |
+-------+---------+-----------+--------+------------+
5 rows in set (0.00 sec)
```

15. Retrieve all the records from DEPOSIT where amount > 1000 and arrange the customer name in descending order.

```
mysql> select * from deposit where amount>1000 order by cname desc;
```

```
+-------+---------+-----------+--------+------------+
| actno | cname   | bname     | amount | adate      |
+-------+---------+-----------+--------+------------+
| 101   | sunil   | mgroad    |   5000 | 1996-04-01 |
| 105   | sandip  | mgroad    |   2000 | 1996-03-31 |
| 102   | rahul   | karolbagh |   3500 | 1995-11-17 |
| 104   | pramod  | mgroad    |   3000 | 1996-03-27 |
| 103   | madhuri | chandni   |   1200 | 1995-12-17 |
+-------+---------+-----------+--------+------------+
5 rows in set (0.00 sec)
```

16. Retrieve customer details from BORROW table where the third character of the customer name is either ‘A’ or ‘D’.

```
mysql> select * from borrow where cNAME LIKE "__a%" or cNAME LIKE "__d%"  ;
+--------+---------+---------+--------+
| loanno | cname   | bname   | amount |
+--------+---------+---------+--------+
| 321    | madhuri | chandni |   2000 |
| 375    | pramod  | mgroad  |   8000 |
+--------+---------+---------+--------+
2 rows in set (0.00 sec)
```

17. Retrieve all the records from the table BORROW where amount is not between 2000 and 8000.

```
mysql> select * from borrow where amount<2000 or amount>8000  ;
+--------+-------+-------+--------+
| loanno | cname | bname | amount |
+--------+-------+-------+--------+
| 201    | anil  | vrce  |   1000 |
+--------+-------+-------+--------+
1 row in set (0.00 sec)
```

18. Find out the unique records from the table DEPOSIT

```
mysql> select distinct actno,cname,bname,amount,adate from deposit;
+-------+---------+-----------+--------+------------+
| actno | cname   | bname     | amount | adate      |
+-------+---------+-----------+--------+------------+
| 100   | anil    | vrce      |   1000 | 1995-03-01 |
| 101   | sunil   | mgroad    |   5000 | 1996-04-01 |
| 102   | rahul   | karolbagh |   3500 | 1995-11-17 |
| 103   | madhuri | chandni   |   1200 | 1995-12-17 |
| 104   | pramod  | mgroad    |   3000 | 1996-03-27 |
```

| 105 | sandip | mgroad | 2000 | 1996-03-31 |
+-------+---------+-----------+--------+------------+
6 rows in set (0.00 sec)

19. Update the amount of all depositors in deposit table by giving them 10% interest (i.e. amount=amount * 0.1) where branch is VRCE.

mysql> update deposit set amount=amount+amount*0.1 where bname="vrce";
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

20. Update the amount of all depositors in deposit table by giving them 10% interest where branch is VRCE and customer name ANIL.

mysql> update deposit set amount=amount+amount*0.1 where bname="vrce" and cname="anil";
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0