

Practical Assignment 2: Write and execute suitable database triggers.  
Consider row level and statement level triggers.

```
mysql> create database account;
Query OK, 1 row affected (0.01 sec)
```

```
mysql> use account
Database changed
```

```
mysql> create table account
-> (
->   acc_no int(20),
->   name varchar(20),
->   amount int(20)
-> );
Query OK, 0 rows affected, 2 warnings (0.04 sec)
```

```
mysql> insert into account values
-> (1,'RAJ',2000),
-> (2,'AJAY',3000),
-> (3,'RAHUL',6000);
Query OK, 3 rows affected (0.01 sec)
Records: 3  Duplicates: 0  Warnings: 0
```

```
mysql> insert into account values
-> (4,'AMIT',7000),
-> (5,'SATISH',8000);
Query OK, 2 rows affected (0.01 sec)
Records: 2  Duplicates: 0  Warnings: 0
```

```
mysql> select * from account;
+-----+-----+-----+
| acc_no | name   | amount |
+-----+-----+-----+
|      1 | RAJ    | 2000   |
|      2 | AJAY   | 3000   |
|      3 | RAHUL  | 6000   |
|      4 | AMIT   | 7000   |
|      5 | SATISH | 8000   |
+-----+-----+-----+
5 rows in set (0.00 sec)
```

```
mysql> create table account_log
-> (
->   acc_no int(20),
->   name varchar(20),
->   amount int(20),
->   tran_type varchar(20),
->   tran_time timestamp
-> );
Query OK, 0 rows affected, 2 warnings (0.03 sec)
```

```
mysql> desc account;
+-----+-----+-----+-----+-----+-----+
| Field | Type          | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| acc_no | int           | YES  |     | NULL    |       |
```

name	varchar(20)	YES		NULL	
amount	int	YES		NULL	

3 rows in set (0.00 sec)

```
mysql> desc account_log;
```

Field	Type	Null	Key	Default	Extra
acc_no	int	YES		NULL	
name	varchar(20)	YES		NULL	
amount	int	YES		NULL	
tran_type	varchar(20)	YES		NULL	
tran_time	timestamp	YES		NULL	

5 rows in set (0.00 sec)

```
mysql> create trigger acc_log
```

```
-> after update
```

```
-> on account
```

```
-> for each row
```

```
-> begin
```

```
-> declare tran_type varchar(20);
```

```
-> declare amt varchar(20);
```

```
-> if old.amount > new.amount then
```

```
-> SET tran_type='Withdraw';
```

```
-> SET amt=old.amount-new.amount;
```

```
-> else
```

```
-> SET tran_type='Deposited';
```

```
-> SET amt=new.amount-old.amount;
```

```
-> end if;
```

```
-> insert into account_log
```

```
values(old.acc_no,old.name,amt,tran_type,now());
```

```
-> end
```

```
-> //
```

Query OK, 0 rows affected (0.07 sec)

```
mysql> select * from account;
```

acc_no	name	amount
1	RAJ	2000
2	AJAY	3000
3	RAHUL	6000
4	AMIT	7000
5	SATISH	8000

5 rows in set (0.00 sec)

```
mysql> update account set amount=5000 where acc_no=1;
```

Query OK, 1 row affected (0.01 sec)

Rows matched: 1 Changed: 1 Warnings: 0

```
mysql> select * from account;
```

acc_no	name	amount
1	RAJ	5000
2	AJAY	3000
3	RAHUL	6000
4	AMIT	7000
5	SATISH	8000

```

+-----+-----+-----+
|      1 | RAJ      | 5000 |
|      2 | AJAY     | 3000 |
|      3 | RAHUL    | 6000 |
|      4 | AMIT     | 7000 |
|      5 | SATISH   | 8000 |
+-----+-----+-----+
5 rows in set (0.00 sec)

```

```

mysql> select * from account_log;
Empty set (0.00 sec)

```

```

mysql> update account set amount=4000 where acc_no=1;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1  Changed: 1  Warnings: 0

```

```

mysql> select * from account;
+-----+-----+-----+
| acc_no | name    | amount |
+-----+-----+-----+
|      1 | RAJ     | 4000   |
|      2 | AJAY    | 3000   |
|      3 | RAHUL   | 6000   |
|      4 | AMIT    | 7000   |
|      5 | SATISH  | 8000   |
+-----+-----+-----+
5 rows in set (0.00 sec)

```