TE IT

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Consider **Account table** containing information of **acc_no, name, amount** of minimum 05 customers.

Write a Trigger that maintains a log of a Account table.

Whenever there is any update operation perform on account table amount, account_log table maintains acc_no, name, amount (that is deposited or withdrawn), Type of transaction(if deposite then 'D' – if withdraw then 'W'), and Timestamp which includes Date and Time.

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MySQL 8.0 Command Line Client - Unicode

mysql> CREATE TABLE account(
    ->     acc_no INT,
    ->     name VARCHAR(15),
    ->     amount INT
    -> );
Query OK, 0 rows affected (0.92 sec)

mysql> INSERT INTO account VALUES(12001,'Yatish',25000),(12002,'Maitreya',27000),
    -> (12003,'Omkar',30000),(12004,'Amey',33000),(12005,'Abhishek',40000),
    -> (12006,'Shubham',12000),(12007,'Deep',10000),(12008,'Gaurav',70000);
Query OK, 8 rows affected (0.18 sec)
Records: 8  Duplicates: 0  Warnings: 0

mysql> SELECT * FROM account;
+--------+----------+--------+
| acc_no | name     | amount |
+--------+----------+--------+
|  12001 | Yatish   |  25000 |
|  12002 | Maitreya |  27000 |
|  12003 | Omkar    |  30000 |
|  12004 | Amey     |  33000 |
|  12005 | Abhishek |  40000 |
|  12006 | Shubham  |  12000 |
|  12007 | Deep     |  10000 |
|  12008 | Gaurav   |  70000 |
+--------+----------+--------+
8 rows in set (0.03 sec)
```

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|  12007 | Deep     |  10000 |
|  12008 | Gaurav   |  70000 |
+--------+----------+--------+
8 rows in set (0.03 sec)

mysql> CREATE TABLE account_log(
    ->     acc_no INT,
    ->     name VARCHAR(15),
    ->     amount INT,
    ->     trans_type VARCHAR(10),
    ->     trans_time TIMESTAMP
    -> );
Query OK, 0 rows affected (1.77 sec)

mysql> DESC account_log;
+------------+-------------+------+-----+---------+-------+
| Field      | Type        | Null | Key | Default | Extra |
+------------+-------------+------+-----+---------+-------+
| acc_no     | int         | YES  |     | NULL    |       |
| name       | varchar(15) | YES  |     | NULL    |       |
| amount     | int         | YES  |     | NULL    |       |
| trans_type | varchar(10) | YES  |     | NULL    |       |
| trans_time | timestamp   | YES  |     | NULL    |       |
+------------+-------------+------+-----+---------+-------+
5 rows in set (0.31 sec)
```

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+--------+----------+--------+-----+----------+-------+
5 rows in set (0.31 sec)

mysql> DELIMITER //
mysql>
mysql> CREATE TRIGGER account_trigger AFTER UPDATE ON account
    -> FOR EACH ROW
    -> BEGIN
    -> DECLARE trans_type VARCHAR(10);
    -> IF OLD.amount > NEW.amount THEN
    -> SET trans_type = 'W';
    -> ELSE
    -> SET trans_type = 'D';
    -> END IF;
    ->
    -> INSERT INTO account_log VALUES(OLD.acc_no,OLD.name,NEW.amount,trans_type,NOW());
    -> END
    -> //
Query OK, 0 rows affected (0.46 sec)

mysql> DELIMITER ;
mysql> UPDATE account SET amount=35000 WHERE name='Yatish';
Query OK, 1 row affected (0.76 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
mysql> UPDATE account SET amount=35000 WHERE name='Yatish';
Query OK, 1 row affected (0.76 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM account_log;
+--------+--------+--------+------------+---------------------+
| acc_no | name   | amount | trans_type | trans_time          |
+--------+--------+--------+------------+---------------------+
|  12001 | Yatish |  35000 | D          | 2020-10-26 18:47:16 |
+--------+--------+--------+------------+---------------------+
1 row in set (0.00 sec)

mysql> UPDATE account SET amount=10000 WHERE name='Shubham';
Query OK, 1 row affected (0.13 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM account_log;
+--------+---------+--------+------------+---------------------+
| acc_no | name    | amount | trans_type | trans_time          |
+--------+---------+--------+------------+---------------------+
|  12001 | Yatish  |  35000 | D          | 2020-10-26 18:47:16 |
|  12006 | Shubham |  10000 | W          | 2020-10-26 18:48:32 |
+--------+---------+--------+------------+---------------------+
2 rows in set (0.00 sec)

mysql> UPDATE account SET amount=50000 WHERE name='Maitreya';
Query OK, 1 row affected (0.07 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM account_log;
```

```
mysql> UPDATE account SET amount=50000 WHERE name='Maitreya';
Query OK, 1 row affected (0.07 sec)
Rows matched: 1  Changed: 1  Warnings: 0

mysql> SELECT * FROM account_log;
+--------+----------+--------+------------+---------------------+
| acc_no | name     | amount | trans_type | trans_time          |
+--------+----------+--------+------------+---------------------+
|  12001 | Yatish   |  35000 | D          | 2020-10-26 18:47:16 |
|  12006 | Shubham  |  10000 | W          | 2020-10-26 18:48:32 |
|  12002 | Maitreya |  50000 | D          | 2020-10-26 18:48:55 |
+--------+----------+--------+------------+---------------------+
3 rows in set (0.04 sec)

mysql> SELECT * FROM account;
+--------+----------+--------+
| acc_no | name     | amount |
+--------+----------+--------+
|  12001 | Yatish   |  35000 |
|  12002 | Maitreya |  50000 |
|  12003 | Omkar    |  30000 |
|  12004 | Amey     |  33000 |
|  12005 | Abhishek |  40000 |
|  12006 | Shubham  |  10000 |
|  12007 | Deep     |  10000 |
|  12008 | Gaurav   |  70000 |
+--------+----------+--------+
8 rows in set (0.02 sec)
```