

NAME :: IBRAR BABAR

ROLL NO. 19P-0104

BS(COMPUTER SCIENCE)

SECTION - 4A

LAB NO. (10)

(Creating database & tables)

USE PERSON;

CREATE TABLE USERS (

USER_ID MEDIUMINT(8) UNSIGNED NOT NULL AUTO_INCREMENT,

USERNAME VARCHAR(15) NOT NULL,

PASSWORD VARCHAR(20) NOT NULL,

EMAIL VARCHAR(30) NOT NULL,

PRIMARY KEY (USER_ID)

);

(INSERTING INTO USERS TABLE)

INSERT INTO USERS VALUES(1, 'IBRAR ', 'FAST123 ', 'ABC@GMAIL.COM');

INSERT INTO USERS VALUES(2, 'BABAR', 'ABC1234', 'DEF@GMAIL.COM');

INSERT INTO USERS VALUES(3, 'RAJPUT', 'BELJUM4', 'CRONA@YAHOO.COM');

SELECT * FROM USERS;

```
mysql> SELECT * FROM USERS;
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | IBRAR | FAST123 | ABC@GMAIL.COM |
| 2 | BABAR | ABC1234 | DEF@GMAIL.COM |
| 3 | RAJPUT | BELJUM4 | CRONA@YAHOO.COM |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

```

CREATE TABLE SUMMARY (
ID                MEDIUMINT(8) UNSIGNED NOT NULL AUTO_INCREMENT,
TOTAL_USER        MEDIUMINT(8) UNSIGNED NOT NULL,
YAHOO              TINYINT(1) UNSIGNED NOT NULL DEFAULT '1',
HOTMAIL            TINYINT(1) UNSIGNED NOT NULL DEFAULT '0',
GMAIL              TINYINT(1) UNSIGNED NOT NULL DEFAULT '1',
PRIMARY KEY (ID), INDEX(TOTAL_USER),
INDEX(TOTAL_USER),
INDEX(YAHOO),
INDEX(HOTMAIL),
INDEX(GMAIL),
FOREIGN KEY (TOTAL_USER) REFERENCES USERS (USER_ID) ON DELETE CASCADE ON UPDATE
CASCADE );

```

(INSERTING INTO SUMMARY TABLE)

```

INSERT INTO SUMMARY VALUES (1,3,1,0,2);

SELECT * FROM SUMMARY;

```

```

mysql> SELECT * FROM SUMMARY$$
+-----+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+-----+
| 1 | 3 | 1 | 0 | 2 |
+-----+-----+-----+-----+-----+
1 row in set (0.00 sec)

```

(TASK#1)

```

DELIMITER $$

CREATE PROCEDURE TASK1()

BEGIN

INSERT INTO SUMMARY VALUES (2,4,2,0,5);

END$$

```

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE TASK1()
  -> BEGIN
  -> INSERT INTO SUMMARY VALUES (2,4,2,0,5);
  -> END$$
Query OK, 0 rows affected (0.00 sec)
```

CALL TASK1\$\$

SELECT * FROM SUMMARY\$\$

```
mysql> SELECT * FROM SUMMARY$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 6 | 3 | 0 | 3 |
| 2 | 4 | 2 | 0 | 5 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

(TASK#2)

CREATE PROCEDURE TASK2()

BEGIN

INSERT INTO USERS VALUES(4, 'BILAL','HELLOWORLD','IBI@GMAIL.COM');

END\$\$

```
mysql> CREATE PROCEDURE TASK2()
  -> BEGIN
  -> INSERT INTO USERS VALUES(4, 'BILAL', 'HELLOWORLD', 'IBI@GMAIL.COM');
  -> END$$
Query OK, 0 rows affected (0.01 sec)
```

CALL TASK2\$\$

SELECT * FROM USERS\$\$

```
mysql> SELECT * FROM USERS$$
```

USER_ID	USERNAME	PASSWORD	EMAIL
1	IBRAR	FAST123	ABC@GMAIL.COM
2	BABAR	ABC1234	DEF@GMAIL.COM
3	RAJPUT	BELJUM4	CRONA@YAHOO.COM
4	BILAL	HELLOWORLD	IBI@GMAIL.COM

```
4 rows in set (0.00 sec)
```

(TASK#3)

```
CREATE PROCEDURE TASK3()
```

```
-> BEGIN
```

```
-> SELECT AVG(YAHOO) FROM SUMMARY;
```

```
-> END$$
```

```
mysql> CREATE PROCEDURE TASK3()
-> BEGIN
-> SELECT AVG(YAHOO) FROM SUMMARY;
-> END$$
Query OK, 0 rows affected (0.00 sec)
```

```
CALL TASK3$$
```

```
mysql> CALL TASK3$$
```

AVG(YAHOO)
2.5000

```
1 row in set (0.00 sec)
```

(TASK#4)

```
mysql> SELECT * FROM SUMMARY$$
```

ID	TOTAL_USER	YAHOO	HOTMAIL	GMAIL
1	6	3	0	3
2	4	2	0	5
3	8	5	3	8
4	12	11	6	10
5	14	15	9	11
6	13	9	14	4

```
6 rows in set (0.00 sec)
```

(FOR MIN_GMAIL)

```
CREATE PROCEDURE TASK4()  
BEGIN  
SELECT MIN(GMAIL) FROM SUMMARY;  
END$$  
CALL TASK4$$
```

```
mysql> CREATE PROCEDURE TASK4()  
-> BEGIN  
-> SELECT MIN(GMAIL) FROM SUMMARY;  
-> END$$  
Query OK, 0 rows affected (0.02 sec)  
  
mysql> CALL TASK4$$
```

MIN(GMAIL)
3

```
1 row in set (0.00 sec)  
  
Query OK, 0 rows affected (0.01 sec)
```

(TASK#5)

```
CREATE PROCEDURE TASK5()  
BEGIN  
SELECT MAX(HOTMAIL) FROM SUMMARY;  
END$$  
CALL TASK5$$
```

```
mysql> CREATE PROCEDURE TASK5()  
-> BEGIN  
-> SELECT MAX(HOTMAIL) FROM SUMMARY;  
-> END$$  
Query OK, 0 rows affected (0.00 sec)  
  
mysql> CALL TASK5$$  
+-----+  
| MAX(HOTMAIL) |  
+-----+  
|          14 |  
+-----+  
1 row in set (0.00 sec)
```

(TASK#6)

(BEFORE UPDATING)

```
mysql> SELECT * FROM SUMMARY$$  
+-----+-----+-----+-----+-----+  
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |  
+-----+-----+-----+-----+-----+  
| 1 | 6 | 3 | 3 | 3 |  
| 2 | 4 | 2 | 0 | 5 |  
| 3 | 8 | 5 | 3 | 8 |  
| 4 | 12 | 11 | 12 | 10 |  
| 5 | 14 | 15 | 9 | 11 |  
| 6 | 13 | 9 | 14 | 4 |  
+-----+-----+-----+-----+-----+  
6 rows in set (0.00 sec)
```

```
CREATE PROCEDURE TASK6()  
BEGIN
```

UPDATE SUMMARY

SET TOTAL_USER=TOTAL_USER+1

WHERE YAHOO <= HOTMAIL;

END\$\$

```
mysql> CREATE PROCEDURE TASK6()  
-> BEGIN  
-> UPDATE SUMMARY  
-> SET TOTAL_USER=TOTAL_USER+1  
-> WHERE YAHOO <= HOTMAIL;  
->  
-> END$$  
Query OK, 0 rows affected (0.00 sec)
```

CALL TASK6\$\$

SELECT * FROM SUMMARY\$\$

```
mysql> CALL TASK6$$  
Query OK, 3 rows affected (0.03 sec)  
  
mysql> SELECT * FROM SUMMARY$$  
+-----+-----+-----+-----+-----+  
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |  
+-----+-----+-----+-----+-----+  
| 1 | 7 | 3 | 3 | 3 |  
| 2 | 4 | 2 | 0 | 5 |  
| 3 | 8 | 5 | 3 | 8 |  
| 4 | 13 | 11 | 12 | 10 |  
| 5 | 14 | 15 | 9 | 11 |  
| 6 | 14 | 9 | 14 | 4 |  
+-----+-----+-----+-----+-----+  
6 rows in set (0.00 sec)
```

(TASK#7 (part(a)))

Delimiter \$\$

create trigger task7a after insert

on person.users

for each row begin

```
insert into person.summary (TOTAL_USER) values (NEW.user_id);  
end$$
```

```
mysql> Delimiter $$  
mysql> create trigger task7a after insert  
-> on person.users  
-> for each row begin  
-> insert into person.summary (TOTAL_USER) values (NEW.user_id);  
-> end$$  
Query OK, 0 rows affected (0.09 sec)
```

1st Entry)

```
insert into users (username,password,email) values ('ibrar','abc123','ibrar@gmail.com')$$  
select * from users$$  
select * from summary$$
```

```
mysql> insert into users (username,password,email) values ('ibrar','abc123','ibrar@gmail.com')$$  
Query OK, 1 row affected (0.03 sec)  
  
mysql> select * from users$$  
+-----+-----+-----+-----+  
| USER_ID | USERNAME | PASSWORD | EMAIL |  
+-----+-----+-----+-----+  
| 1 | ibrar | abc123 | ibrar@gmail.com |  
+-----+-----+-----+-----+  
1 row in set (0.00 sec)  
  
mysql> select * from summary$$  
+-----+-----+-----+-----+-----+  
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |  
+-----+-----+-----+-----+-----+  
| 1 | 1 | 1 | 0 | 1 |  
+-----+-----+-----+-----+-----+  
1 row in set (0.00 sec)
```

2nd Entry)

```
insert into users (username,password,email) values ('rajput','fast123','fast@gmail.com')$$  
select * from users$$  
select * from summary$$
```



```
mysql> insert into users (username,password,email) values ('rajput','fast123','fast@gmail.com')$$
Query OK, 1 row affected (0.08 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

3rd Enrty)

insert into users (username,password,email) values ('ahmad','punjab','amad@gmail.com')\$\$

select * from users\$\$

select * from summary\$\$

```
mysql> insert into users (username,password,email) values ('ahmad','punjab','amad@gmail.com')$$
Query OK, 1 row affected (0.03 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
| 3 | ahmad | punjab | amad@gmail.com |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
| 3 | 3 | 1 | 0 | 1 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

4th Enrty)

insert into users (username,password,email) values ('ali','aqls','ali@gmail.com')\$\$

select * from users\$\$

select * from summary\$\$

```
mysql> insert into users (username,password,email) values ('ali','aqls','ali@gmail.com')$$
Query OK, 1 row affected (0.11 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
| 3 | ahmad | punjab | amad@gmail.com |
| 4 | ali | aqls | ali@gmail.com |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
| 3 | 3 | 1 | 0 | 1 |
| 4 | 4 | 1 | 0 | 1 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

5th Enrty)

insert into users (username,password,email) values ('bilal','ahamd','bilal@gmail.com')\$\$

select * from users\$\$

select * from summary\$\$

```
mysql> insert into users (username,password,email) values ('bilal','ahamd','bilal@gmail.com')$$
Query OK, 1 row affected (0.09 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
| 3 | ahmad | punjab | amad@gmail.com |
| 4 | ali | aqls | ali@gmail.com |
| 5 | bilal | ahamd | bilal@gmail.com |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
| 3 | 3 | 1 | 0 | 1 |
| 4 | 4 | 1 | 0 | 1 |
| 5 | 5 | 1 | 0 | 1 |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

(TASK#7 (part(b)))

Delimiter \$\$

create trigger task7b before delete

on person.users

for each row begin

delete from person.summary where (total_user=old.user_id);

end\$\$

```
mysql> Delimiter $$
mysql> create trigger task7b before delete
      -> on person.users
      -> for each row begin
      -> delete from person.summary where (total_user=old.user_id);
      -> end$$
Query OK, 0 rows affected (0.11 sec)
```

(BEFORE DELETION THE TABLES ARE)

```
mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
| 3 | ahmad | punjab | amad@gmail.com |
| 4 | ali | aqls | ali@gmail.com |
| 5 | bilal | ahamd | bilal@gmail.com |
+-----+-----+-----+-----+
5 rows in set (0.00 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
| 3 | 3 | 1 | 0 | 1 |
| 4 | 4 | 1 | 0 | 1 |
| 5 | 5 | 1 | 0 | 1 |
+-----+-----+-----+-----+-----+
5 rows in set (0.00 sec)
```

(AFTER DELETION)

1ST DELETION)

delete from users where user_id = 5\$\$

select * from users\$\$

select * from summary\$\$

```
mysql> delete from users where user_id = 5$$
Query OK, 1 row affected (0.05 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
| 3 | ahmad | punjab | amad@gmail.com |
| 4 | ali | aqls | ali@gmail.com |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
| 3 | 3 | 1 | 0 | 1 |
| 4 | 4 | 1 | 0 | 1 |
+-----+-----+-----+-----+
4 rows in set (0.00 sec)
```

2nd DELETION)

delete from users where user_id=4\$\$

select * from users\$\$

select * from summary\$\$

```
mysql> delete from users where user_id=4$$
Query OK, 1 row affected (0.05 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
| 3 | ahmad | punjab | amad@gmail.com |
+-----+-----+-----+-----+
3 rows in set (0.02 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
| 3 | 3 | 1 | 0 | 1 |
+-----+-----+-----+-----+
3 rows in set (0.00 sec)
```

3rd DELETION)

Delete from users where user_id=3\$\$

Select * from summary\$\$

Select * from users\$\$

```
mysql> delete from users where user_id=3$$
Query OK, 1 row affected (0.05 sec)

mysql> select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
| 2 | 2 | 1 | 0 | 1 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
| 2 | rajput | fast123 | fast@gmail.com |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)
```

4th DELETION)

Delete from users where user_id=2\$\$

Select * from summary\$\$

Select * from users\$\$

```
mysql> Delete from users where user_id=2$$
Query OK, 1 row affected (0.06 sec)

mysql> Select * from summary$$
+-----+-----+-----+-----+
| ID | TOTAL_USER | YAHOO | HOTMAIL | GMAIL |
+-----+-----+-----+-----+
| 1 | 1 | 1 | 0 | 1 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql> Select * from users$$
+-----+-----+-----+-----+
| USER_ID | USERNAME | PASSWORD | EMAIL |
+-----+-----+-----+-----+
| 1 | ibrar | abc123 | ibrar@gmail.com |
+-----+-----+-----+-----+
1 row in set (0.00 sec)
```

5th DELETION)

Delete from users where user_id=1\$\$

Select * from summary\$\$

Select * from users\$\$

```
mysql> Delete from users where user_id=1$$
Query OK, 1 row affected (0.03 sec)

mysql> Select * from summary$$
Empty set (0.00 sec)

mysql> Select * from users$$
Empty set (0.00 sec)
```
