



DBMS EXPERIMENT 11:

Trigger

Create a trigger in MySQL to log the changes of the EMPLOYEES table with fields ID, Name and Email. Also create a new table named EMPLOYEES_AUDIT to keep the changes of the employee table. Create a BEFOREUPDATE trigger that is invoked before a change is made to the employees table.

OUTPUT:

Program:-1

```
mysql> CREATE PROCEDURE student_info()  
-> select * from student_info;  
Query OK, 0 rows affected (0.00 sec)  
  
mysql> call student_info();  
+-----+-----+-----+-----+  
| stuid | name | area | subject |  
+-----+-----+-----+-----+  
| 201 | raj | chennai | dbms |  
| 202 | rahul | hyderabad | ooad |  
| 203 | rahim | munbai | java |  
| 204 | vikas | kochi | python |  
+-----+-----+-----+-----+  
4 rows in set (0.00 sec)  
  
Query OK, 0 rows affected (0.00 sec)
```

Program:-2

```
mysql> DELIMITER $$  
mysql>  
mysql> CREATE PROCEDURE GetCustomerLevel(  
-> in p_customerNumber int(11),  
-> out p_customerLevel varchar(10))  
-> BEGIN  
-> DECLARE creditlin double;  
->  
-> SELECT creditlimit INTO creditlin  
-> FROM customers  
-> WHERE customerNumber = p_customerNumber;  
->  
-> IF creditlin > 50000 THEN  
-> SET p_customerLevel = 'PLATINUM';  
-> ELSEIF (creditlin <= 50000 AND creditlin >= 10000) THEN  
-> SET p_customerLevel = 'GOLD';  
-> ELSEIF creditlin < 10000 THEN  
-> SET p_customerLevel = 'SILVER';  
-> END IF;  
->  
-> END$$  
Query OK, 0 rows affected (0.00 sec)
```

Program :-1

```
mysql> DELIMITER $$
mysql> CREATE PROCEDURE build_email_list (INOUT email_list varchar(4000))
-> BEGIN
-> DECLARE v_finished INTEGER DEFAULT 0;
-> DECLARE v_email varchar(100) DEFAULT "";
-> DECLARE email_cursor CURSOR FOR
-> SELECT email FROM employees;
-> DECLARE CONTINUE HANDLER FOR
-> NOT FOUND SET v_finished = 1;
-> OPEN email_cursor;
-> get_email:LOOP
-> FETCH email_cursor INTO v_email;
-> IF v_finished = 1 THEN
-> LEAVE get_email;
-> END IF;
-> SET email_list = CONCAT(v_email,";",email_list);
-> END LOOP get_email;
-> CLOSE email_cursor;
-> END $$
Query OK, 0 rows affected (0.00 sec)

mysql> DELIMITER ;
mysql> SET @email_list = "";
Query OK, 0 rows affected (0.00 sec)

mysql> CALL build_email_list(@email_list);
Query OK, 0 rows affected, 1 warning (0.00 sec)

mysql> select @email_list;
+-----+
| @email_list |
+-----+
| stony@marvel.com;kclark@deconics.com;pharry@warnerbros.com; |
+-----+
1 row in set (0.00 sec)
```