

C)

```
SHOW PROCESSLIST;

SET GLOBAL event_scheduler = ON;

CREATE EVENT increment_budget
ON SCHEDULE EVERY 1 MINUTE DO
    UPDATE University.department SET budget = 1.05 * budget;

SHOW EVENTS\G;

select * from department;
```

MariaDB [University]> MariaDB [University]> Query OK, 0 rows affected (0.00 sec)

MariaDB [University]> MariaDB [University]> -> -> Query OK, 0 rows affected (0.00 sec)

MariaDB [University]> MariaDB [University]> \*\*\*\*\* 1. row \*\*\*\*\*

```
*****
      Db: University
      Name: increment_budget
      Definer: root@localhost
      Time zone: SYSTEM
      Type: RECURRING
      Execute at: NULL
      Interval value: 1
      Interval field: MINUTE
      Starts: 2018-02-15 14:34:20
      Ends: NULL
      Status: ENABLED
      Originator: 1
character_set_client: utf8mb4
collation_connection: utf8mb4_general_ci
      Database Collation: utf8mb4_general_ci
1 row in set (0.00 sec)
```

ERROR: No query specified

^GMariaDB [University]> MariaDB [University]> +-----+-----+-----+

dept_name	building	budget
Biology	Watson	99225.00
Comp. Sci.	Taylor	110250.00
Dance	Watson	41688.29
Elec. Eng.	Taylor	93712.50
Finance	Painter	132300.00
History	Painter	55125.00
Music	Packard	88200.00
Physics	Watson	77175.00

8 rows in set (0.00 sec)



```

select * from department;
MariaDB [University]> +-----+-----+-----+
| dept_name | building | budget |
+-----+-----+-----+
| Biology   | Watson   | 99225.00 |
| Comp. Sci. | Taylor   | 110250.00 |
| Dance     | Watson   | 41688.29 |
| Elec. Eng. | Taylor   | 93712.50 |
| Finance   | Painter   | 132300.00 |
| History   | Painter   | 55125.00 |
| Music     | Packard   | 88200.00 |
| Physics   | Watson   | 77175.00 |
+-----+-----+-----+
8 rows in set (0.00 sec)

select * from department;
MariaDB [University]> +-----+-----+-----+
| dept_name | building | budget |
+-----+-----+-----+
| Biology   | Watson   | 99325.00 |
| Comp. Sci. | Taylor   | 110350.00 |
| Dance     | Watson   | 41788.29 |
| Elec. Eng. | Taylor   | 93812.50 |
| Finance   | Painter   | 132400.00 |
| History   | Painter   | 55225.00 |
| Music     | Packard   | 88300.00 |
| Physics   | Watson   | 77275.00 |
+-----+-----+-----+
8 rows in set (0.00 sec)

```

D)

```

show global variables like 'autocommit';
MariaDB [University]> +-----+
| Variable_name | Value |
+-----+
| autocommit    | ON    |
+-----+
1 row in set (0.00 sec)

```

```
SET AUTOCOMMIT=0;
```

```
MariaDB [University]> Query OK, 0 rows affected (0.00 sec)
```

```
UPDATE University.department SET budget = budget + 0.01 WHERE dept_name='Physics';
```

```
MariaDB [University]> Query OK, 1 row affected (0.00 sec)
```

```
Rows matched: 1  Changed: 1  Warnings: 0
```

```
SELECT * FROM department;
```

```
MariaDB [University]> +-----+-----+-----+
| dept_name | building | budget |
+-----+-----+-----+
| Biology   | Watson   | 99725.00 |
| Comp. Sci. | Taylor   | 110750.00 |
| Dance     | Watson   | 42188.29 |
| Elec. Eng. | Taylor   | 94212.50 |
| Finance   | Painter   | 132800.00 |
| History   | Painter   | 55625.00 |
| Music     | Packard   | 88700.00 |
| Physics   | Watson   | 77675.01 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
ROLLBACK;
```

```
MariaDB [University]> Query OK, 0 rows affected (0.05 sec)
```

```
SELECT * FROM department;
```

```
MariaDB [University]> +-----+-----+-----+
| dept_name | building | budget |
+-----+-----+-----+
| Biology   | Watson   | 99725.00 |
| Comp. Sci. | Taylor   | 110750.00 |
| Dance     | Watson   | 42188.29 |
| Elec. Eng. | Taylor   | 94212.50 |
| Finance   | Painter   | 132800.00 |
| History   | Painter   | 55625.00 |
| Music     | Packard   | 88700.00 |
| Physics   | Watson   | 77675.00 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
show SESSION variables like 'autocommit';
```

```
MariaDB [University]> +-----+
| Variable_name | Value |
+-----+
| autocommit    | OFF   |
+-----+
1 row in set (0.00 sec)
```

```
UPDATE University.department SET budget = budget + 0.01 WHERE dept_name='Physics';
MariaDB [University]> Query OK, 1 row affected (0.00 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
commit;
```

```
MariaDB [University]> Query OK, 0 rows affected (0.04 sec)
```

```
SELECT * FROM department;
```

```
MariaDB [University]> +-----+-----+-----+
| dept_name | building | budget |
+-----+-----+-----+
| Biology   | Watson   | 99725.00 |
| Comp. Sci. | Taylor   | 110750.00 |
| Dance      | Watson   | 42188.29 |
| Elec. Eng. | Taylor   | 94212.50 |
| Finance    | Painter   | 132800.00 |
| History    | Painter   | 55625.00 |
| Music      | Packard   | 88700.00 |
| Physics    | Watson    | 77675.01 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

```
CREATE TABLE budget_only (
  budget INT
);
```

```
MariaDB [University]> MariaDB [University]> -> -> Query OK, 0 rows affected (0.16 sec)
```

```
ROLLBACK;
```

```
MariaDB [University]> Query OK, 0 rows affected (0.00 sec)
```

```
show tables;
```

```
MariaDB [University]> +-----+
| Tables_in_University |
+-----+
| advisor               |
| budget_only           |
| classroom             |
| course               |
| department            |
| instructor            |
| prereq               |
| section               |
| student              |
| takes                |
| teaches              |
| time_slot            |
| tot_C                |
+-----+
13 rows in set (0.00 sec)
```

```
1:**- *SQL* Bot L2427 (SQLi[MySQL]:run)
```

E)

```

create table inst_dept AS
( SELECT * FROM instructor
    NATURAL JOIN
    department
);
^GMariaDB [University]> MariaDB [University]>      ->      ->      ->      -> Query OK, 12 rows affected
(0.26 sec)
Records: 12  Duplicates: 0  Warnings: 0

select * from inst_dept;
MariaDB [University]> +-----+-----+-----+-----+-----+-----+
| dept_name | ID   | name      | salary | building | budget |
+-----+-----+-----+-----+-----+-----+
| Comp. Sci. | 10101 | Srinivasan | 68250.00 | Taylor   | 110750.00 |
| Finance    | 12121 | Wu         | 90000.00 | Painter  | 132800.00 |
| Music      | 15151 | Mozart     | 42000.00 | Packard  | 88700.00  |
| Physics    | 22222 | Einstein   | 95000.00 | Watson   | 77675.01  |
| History    | 32343 | El Said    | 63000.00 | Painter  | 55625.00  |
| Physics    | 33456 | Gold       | 87000.00 | Watson   | 77675.01  |
| Comp. Sci. | 45565 | Katz        | 75000.00 | Taylor   | 110750.00 |
| History    | 58583 | Califleri  | 65100.00 | Painter  | 55625.00  |
| Finance    | 76543 | Singh      | 80000.00 | Painter  | 132800.00 |
| Biology    | 76766 | Crick       | 72000.00 | Watson   | 99725.00  |
| Comp. Sci. | 83821 | Brandt     | 92000.00 | Taylor   | 110750.00 |
| Elec. Eng. | 98345 | Kim        | 80000.00 | Taylor   | 94212.50  |
+-----+-----+-----+-----+-----+-----+
12 rows in set (0.00 sec)

```

```

DELIMITER //
CREATE TRIGGER budget_update
before update ON inst_dept
FOR EACH ROW
BEGIN
    IF new.budget <> old.budget
    THEN
        BEGIN
            UPDATE department SET budget = new.budget WHERE building = new.building;
        END;
    END IF;
END;//
DELIMITER ;

MariaDB [University]> MariaDB [University]>      ->      ->      ->      ->      ->      ->      ->      ->
->      -> Query OK, 0 rows affected (0.08 sec)

```

1\*\*\*. \*SQL\* Bot 11018 (SQLi[MySQL]:cup)

```

DELIMITER //
CREATE TRIGGER building_update
before update ON inst_dept
FOR EACH ROW
BEGIN
    IF new.building <> old.building
    THEN
        BEGIN
            UPDATE department SET building = new.building WHERE dept_name = new.dept_name;
        END;
    END IF;
END;//
DELIMITER ;

MariaDB [University]> MariaDB [University]> MariaDB [University]>      ->      ->      ->      ->      ->
->      ->      ->      ->      ->      -> Query OK, 0 rows affected (0.09 sec)

```

```
update inst_dept set budget=150000 where name='Srinivasan';
MariaDB [University]> Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
update inst_dept set budget=150000 where name='Srinivasan';
MariaDB [University]> Query OK, 1 row affected (0.04 sec)
Rows matched: 1  Changed: 1  Warnings: 0
```

```
select * from department;
MariaDB [University]> +-----+-----+-----+
| dept_name | building | budget |
+-----+-----+-----+
| Biology   | Watson   | 99725.00 |
| Comp. Sci. | Taylor   | 150000.00 |
| Dance     | Watson   | 42188.29 |
| Elec. Eng. | Taylor   | 94212.50 |
| Finance   | Painter   | 132800.00 |
| History    | Painter   | 55625.00 |
| Music     | Packard   | 88700.00 |
| Physics    | Watson   | 77675.01 |
+-----+-----+-----+
8 rows in set (0.00 sec)
```

F)

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

G)



```

DELIMITER //
CREATE FUNCTION raise_by_ten (num FLOAT)
returns FLOAT
BEGIN
declare next_num FLOAT;
SET next_num = num + 10;
return next_num;
END;
DELIMITER ;

```

```

MariaDB [University]> MariaDB [University]> MariaDB [University]>
-> -> -> -> ->
-> -> Query OK, 0 rows affected (0.02 sec)

```

```

select raise_by_ten(100);
MariaDB [University]> +-----+
| raise_by_ten(100) |
+-----+
|                110 |
+-----+
1 row in set (0.01 sec)

```

```

create table store (
item_name VARCHAR(50),
quantity INT,
PRIMARY KEY(item_name)
);

```

```

MariaDB [canteen]> MariaDB [canteen]> -> -> -> -> Query OK, 0 rows affected (0.13 sec)
ec)

```

```

CREATE TABLE cart (
item_name VARCHAR(50),
quantity INT,
price FLOAT,
status ENUM('old', 'new'),
PRIMARY KEY(item_name)
)

```

```

;
MariaDB [canteen]> -> -> -> -> -> -> -> -> Query OK, 0 rows affected (0.11 sec)
d (0.11 sec)

```

```

1:**- *SQL* Bot 1317 (SQLi[MvSQL]:run)

```

