```
---->MariaDB [(none)]> use School
Reading table information for completion of table and column names
You can turn off this feature to get a quicker startup with -A

Database changed
MariaDB [School]> delimiter //
MariaDB [School]> create procedure sp_get() begin select * from employee1; end //
Query OK, 0 rows affected (0.003 sec)

MariaDB [School]> delimiter;
    -> ;
    -> //
ERROR 1064 (42000): You have an error in your SQL syntax; check the manual that corresponds to
your MariaDB server version for the right syntax to use near 'delimiter' at line 1
MariaDB [School]> delimiter ;
MariaDB [School]> call sp_get();
+----+---------+------------------+------------+---------+
| id | name    | email            | Mobileno   | address |
+----+---------+------------------+------------+---------+
|  1 | avni    | abc123@gmail.com | 3214567890 | abcxyz  |
|  2 | anjani  | xyz123@gmail.com | 2134564321 | xyzabc  |
|  3 | riya    | abc123@gmail.com | 3214567890 | abcxyz  |
|  4 | shriya  | xyz123@gmail.com | 2134564321 | xyzabc  |
|  5 | kajal   | abc123@gmail.com | 3214567890 | abcxyz  |
|  6 | krishna | xyz123@gmail.com | 3214567890 | xyzabc  |
|  7 | shruti  | abc123@gmail.com | 3214567890 | abcxyz  |
|  8 | dipali  | xyz123@gmail.com | 2134564321 | xyzabc  |
|  9 | pinal   | abc123@gmail.com | 3214567890 | abcxyz  |
| 10 | vidhi   | xyz123@gmail.com | 2134564321 | xyzabc  |
+----+---------+------------------+------------+---------+
10 rows in set (0.001 sec)

Query OK, 0 rows affected (0.002 sec)

====================FUNCTION========================

MariaDB [School]> delimiter $$
MariaDB [School]> create function Daily_wages(wage decimal(10,2))
    -> returns decimal(10,2)
    -> deterministic
    -> begin
    -> declare daily_wage decimal(10,2);
    -> set daily_wage = wage * 8;
    -> return(daily_wage);
    -> end $$
Query OK, 0 rows affected (0.004 sec)

MariaDB [School]> delimiter ;
MariaDB [School]> select Daily_wages(50);
+-----------------+
| Daily_wages(50) |
+-----------------+
```

```
|       400.00 |
+----------------+
1 row in set (0.001 sec)
```

=====================TRIGGER==================

```
MariaDB [School]> create trigger agecheck before insert on people for each row if NEW.age < 0
   -> then set NEW.age = 0; end if ; //
Query OK, 0 rows affected (0.006 sec)

MariaDB [School]> delimiter ;
MariaDB [School]> insert into people values (-20,'sid'),(30,'josh');
Query OK, 2 rows affected (0.012 sec)
Records: 2  Duplicates: 0  Warnings: 0

MariaDB [School]> select * from people;
+------+------+
| age  | name |
+------+------+
|    0 | sid  |
|   30 | josh |
+------+------+
2 rows in set (0.001 sec)
```

=================TRIGGER AFTER INSERT==================

```
MariaDB [School]> CREATE TABLE members (id INT AUTO_INCREMENT primary key,name
VARCHAR(100) NOT NULL, email VARCHAR(255),birthDate DATE);
Query OK, 0 rows affected (0.014 sec)

MariaDB [School]> CREATE TABLE reminders(id INT AUTO_INCREMENT,memberId
INT,message VARCHAR(255) NOT NULL,PRIMARY KEY (id , memberId) );
Query OK, 0 rows affected (0.013 sec)

MariaDB [School]> DELIMITER $$
MariaDB [School]> CREATE TRIGGER after_members_insert
   -> AFTER INSERT
   -> ON members FOR EACH ROW
   -> BEGIN
   ->  IF NEW.birthDate IS NULL THEN
   -> INSERT INTO reminders(memberId, message)
   -> VALUES(new.id,CONCAT('Hi ', NEW.name, ', please update your date of birth.'));
   ->  END IF;
   -> END$$
Query OK, 0 rows affected (0.008 sec)
MariaDB [School]> DELIMITER ;

MariaDB [School]> INSERT INTO members(name, email, birthDate) VALUES('shreya patel' ,
'shreya@gmail.com', NULL);
Query OK, 1 row affected (0.006 sec)

MariaDB [School]> SELECT * FROM reminders;
```

```
+----+----------+---------------------------------------------------+
| id | memberId | message                                           |
+----+----------+---------------------------------------------------+
|  1 |        1 | Hi shreya patel, please update your date of birth. |
+----+----------+---------------------------------------------------+
1 row in set (0.001 sec)
```

==========UPDATE BEFORE=====================

```
MariaDB [School]> CREATE TABLE person (name varchar(45), age int);
Query OK, 0 rows affected (0.010 sec)

MariaDB [School]> INSERT INTO person VALUES ('Matthew', 25), ('Mark', 20);
Query OK, 2 rows affected (0.003 sec)
Records: 2  Duplicates: 0  Warnings: 0

MariaDB [School]>
MariaDB [School]>
MariaDB [School]> delimiter //
MariaDB [School]> CREATE TRIGGER person_bu BEFORE UPDATE
    -> ON person
    -> FOR EACH ROW
    -> IF NEW.age < 18 THEN
    -> SIGNAL SQLSTATE '50002' SET MESSAGE_TEXT = 'Person must be older than 18.' ;
    -> END IF; //
Query OK, 0 rows affected (0.005 sec)

MariaDB [School]> delimiter ;
MariaDB [School]> UPDATE person SET age = 17 WHERE name = 'John';
Query OK, 0 rows affected (0.002 sec)
Rows matched: 0  Changed: 0  Warnings: 0

MariaDB [School]> UPDATE person SET age = 17 WHERE name = 'Mark';
ERROR 1644 (50002): Person must be older than 18.
```

=============AFTER UPDATE=============

```
MariaDB [School]> CREATE TABLE average_age (age int);
Query OK, 0 rows affected (0.016 sec)

MariaDB [School]> delimiter //
MariaDB [School]> CREATE TRIGGER person_au AFTER UPDATE
    -> ON person
    -> FOR EACH ROW
    -> UPDATE average_age SET average = (SELECT AVG(age) FROM person); //
Query OK, 0 rows affected (0.006 sec)

MariaDB [School]> delimiter ;
MariaDB [School]> UPDATE person SET age = 21 WHERE name = 'Mark' ;
ERROR 1054 (42S22): Unknown column 'average' in 'field list'
MariaDB [School]> UPDATE person SET age = 21 WHERE name = 'john' ;
Query OK, 0 rows affected (0.001 sec)
```

Rows matched: 0 Changed: 0 Warnings: 0

=============BEFORE DELETE===========

MariaDB [School]> CREATE TABLE person_archive (name varchar(45), age int);
Query OK, 0 rows affected (0.016 sec)

MariaDB [School]> delimiter //
MariaDB [School]> CREATE TRIGGER person_bd BEFORE DELETE
    -> ON person
    -> FOR EACH ROW
    -> INSERT INTO person_archive (name, age)
    -> VALUES (OLD.name, OLD.age); //
Query OK, 0 rows affected (0.005 sec)

MariaDB [School]> delimiter ;
MariaDB [School]> DELETE FROM person WHERE name = 'John';
Query OK, 0 rows affected (0.003 sec)

MariaDB [School]> DELETE FROM person WHERE name = 'Mark';
Query OK, 1 row affected (0.004 sec)

MariaDB [School]> Select * from person_archive;
+------+------+
| name | age |
+------+------+
| Mark | 20 |
+------+------+
1 row in set (0.001 sec)

=========AFTER DELETE===================

MariaDB [School]> delimiter //
MariaDB [School]> CREATE TRIGGER person_ad AFTER DELETE
    -> ON person
    -> FOR EACH ROW
    -> UPDATE average_age SET average = (SELECT AVG(person.age) FROM person); //
Query OK, 0 rows affected (0.006 sec)

MariaDB [School]> delimiter ;
MariaDB [School]> DELETE FROM person WHERE name = 'John';
Query OK, 0 rows affected (0.003 sec)

MariaDB [School]> Select * from average_age
    -> ;
Empty set (0.001 sec)

MariaDB [School]> Select * from average_age ;
Empty set (0.001 sec)