

1.DISIPADOR 1:

```
--(1 Km=0.621371 millas y 1 Milla=1.609344 Km)
```

```
--dp_inser_distancia
```

```
DROP TRIGGER IF EXISTS dp_inser_distancia;
DELIMITER //
CREATE TRIGGER dp_inser_distancia BEFORE INSERT ON DISTANCIAS
FOR EACH ROW
BEGIN
    IF NEW.distancia_km IS NULL THEN
        SET NEW.distancia_km = 0.621371 * NEW.distancia_milla;
    ELSE-- NEW.distancia_milla IS NULL THEN
        SET NEW.distancia_milla = 1.609344 * NEW.distancia_km;
    END IF;
END //
delimiter ;
```

```
INSERT INTO DISTANCIAS (ruta, distancia_km) VALUES
("A",10);
INSERT INTO DISTANCIAS (ruta, distancia_milla) VALUES
("B",10);
```

```
MariaDB [RUTAS]> SELECT * FROM DISTANCIAS;
+-----+-----+-----+
| ruta | distancia_km | distancia_milla |
+-----+-----+-----+
| A    |          10.00 |          16.09 |
| B    |           6.21 |          10.00 |
+-----+-----+-----+
2 rows in set (0.000 sec)
```

```
-- 2 dp_modi_distancia
```

```
INSERT INTO DISTANCIAS (ruta, distancia_km) VALUES  
("A",10);  
INSERT INTO DISTANCIAS (ruta, distancia_milla) VALUES  
("B",10);
```

```
DROP TRIGGER IF EXISTS dp_modi_distancia;  
DELIMITER //  
CREATE TRIGGER dp_modi_distancia BEFORE UPDATE ON DISTANCIAS  
FOR EACH ROW  
BEGIN  
    IF NEW.distancia_km IS NULL THEN  
        SET NEW.distancia_km = 0.621371 * NEW.distancia_milla;  
    ELSE -- NEW.distancia_milla IS NULL THEN  
        SET NEW.distancia_milla = 1.609344 * NEW.distancia_km;  
    END IF;  
END //  
delimiter ;
```

ANTES DEL TRIGGER:

```
MariaDB [RUTAS]> select * from DISTANCIAS;  
+-----+-----+-----+  
| ruta | distancia_km | distancia_milla |  
+-----+-----+-----+  
| A    |          10.00 |          16.09 |  
| B    |           6.21 |          10.00 |  
+-----+-----+-----+  
2 rows in set (0.001 sec)
```

```
UPDATE DISTANCIAS  
SET distancia_km = 33  
WHERE ruta='A';
```

```
UPDATE DISTANCIAS  
SET distancia_milla = 7  
WHERE ruta='B';
```

CON EL TRIGGER:

```
MariaDB [RUTAS]> select * from DISTANCIAS;  
+-----+-----+-----+  
| ruta | distancia_km | distancia_milla |  
+-----+-----+-----+  
| A    |          33.00 |          53.11 |  
| B    |           7.00 |          11.27 |  
+-----+-----+-----+  
2 rows in set (0.000 sec)
```