

Tables Teacher and teacher_log created in entri_d41 database. Inserted 8 rows.

```

1 • CREATE TABLE teachers (
2   id INT PRIMARY KEY,
3   name VARCHAR(100),
4   subject VARCHAR(50),
5   experience INT,
6   salary DECIMAL(10, 2)
7 );
8
9 • INSERT INTO teachers (id, name, subject, experience, salary)
10 VALUES
11 (1, 'John Doe', 'Math', 5, 50000.00),
12 (2, 'Jane Smith', 'Science', 8, 55000.00),
13 (3, 'Mark Lee', 'History', 12, 60000.00),
14 (4, 'Emily Davis', 'English', 6, 48000.00),
15 (5, 'David Brown', 'Math', 15, 65000.00),
16 (6, 'Linda White', 'Science', 4, 47000.00),
17 (7, 'Robert Clark', 'Geography', 10, 52000.00),
18 (8, 'Sarah Wilson', 'History', 3, 46000.00);
40 • CREATE TABLE teacher_log (
41   teacher_id INT,
42   action VARCHAR(50),
43   time_stamp TIMESTAMP DEFAULT CURRENT_TIMESTAMP
44 );

```

1. Create a before insert trigger named before_insert_teacher that will raise an error “salary cannot be negative” if the salary inserted to the table is less than zero.

```

20 • CREATE TRIGGER before_insert_teacher
21 BEFORE INSERT ON teachers
22 FOR EACH ROW
23 BEGIN
24   IF NEW.salary < 0 THEN
25     SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = "Employee with salary negative is not allowed";
26   END IF;
27 END;
28
29 • INSERT INTO teachers (id, name, subject, experience, salary)
30 VALUES
31 (9, 'John David', 'Social Science', 5, -20000);
65 22:59:06 INSERT INTO teachers (id, name, subject, experience, salary) VALUES (9, 'John David', 'Social Science', 5, -20000); Error Code: 1644. Employee with salary negative is not allowed

```

2. Create an after insert trigger named after_insert_teacher that inserts a row with teacher_id, action, timestamp to a table called teacher_log when a new entry gets inserted to the teacher table.

```

47 DELIMITER $$
48 • CREATE TRIGGER after_insert_teacher
49 AFTER INSERT ON teachers
50 FOR EACH ROW
51 BEGIN
52   INSERT INTO teacher_log (teacher_id, action)
53   VALUES (NEW.id, 'INSERT');
54 END;
55 DELIMITER ;
56
57 • INSERT INTO teachers (id, name, subject, experience, salary)
58 VALUES
59 (12, 'Dan Mathew', 'Science', 8, 90000.00);

```

teacher_id	action	time_stamp
11	INSERT	2024-11-16 22:43:28
1	Deleted entry from teacher	2024-11-16 22:59:09
12	INSERT	2024-11-16 23:01:43

```

61 • SELECT * FROM Teachers;

```

id	name	subject	experience	salary
7	Robert Clark	Geography	10	52000.00
8	Sarah Wilson	History	3	46000.00
10	Siri Dan	Math	8	90000.00
11	Siri Dan	Math	8	90000.00
12	Dan Mathew	Science	8	90000.00

3. Create a before delete trigger that will raise an error when you try to delete a row that has experience greater than 10 years

```

67 DELIMITER $$
68 • CREATE TRIGGER before_delete
69 BEFORE DELETE ON teachers
70 FOR EACH ROW
71 BEGIN
72   IF OLD.Experience > 10 THEN
73     SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = "Employee with Experience greater than 10 cant be deleted";
74   END IF;
75 END;
76 DELIMITER ;
77
78 • DELETE FROM teachers WHERE Name='Mark Lee';
69 23:04:55 DELETE FROM teachers WHERE Name='Mark Lee' Error Code: 1644. Employee with Experience greater than 10 cant be deleted

```

4. Create an after delete trigger that will insert a row to teacher_log table when that row is deleted from teacher table.

```
81  /* Create an after delete trigger that will insert a row to teacher_log table when that row is deleted from teacher table.*/
82  DELIMITER $$
83  * CREATE TRIGGER After_delete
84  AFTER DELETE ON teachers
85  FOR EACH ROW
86  BEGIN
87      INSERT INTO teacher_log(teacher_id,action) VALUES (OLD.ID,"Deleted entry from teacher");
88  END $$
89  DELIMITER ;
90
91  * DELETE FROM Teachers WHERE ID=1;
92  SELECT * FROM Teacher_log;
```

Result Grid | Filter Rows | Export | Wrap Cell Contents

	teacher_id	action	time_stamp
11		INSERT	2024-11-16 22:43:28
1		Deleted entry from teacher	2024-11-16 22:54:09
12		INSERT	2024-11-16 23:01:43