

Testing trigger		<i>Trigger 1-Type: Before Insert</i>
Steps	Description & Query	Expected Result
Step1	Insert a new row into WorkCenters table: INSERT INTO WorkCenters(name, capacity) VALUES('Mold Machine', 100);	NA
Step2	Query data from the WorkCenterStats table: SELECT * FROM WorkCenterstats;	totalCapacity 100
Step3	Insert a new work center: INSERT INTO WorkCenters(name, capacity) VALUES('Packing', 200);	NA
Step4	Finally query data from the WorkCenterStats table SELECT * FROM WorkCenterStats;	totalCapacity 300

Testing trigger		<i>Trigger 2-Type: After Insert</i>
Steps	Description & Query	Expected Result
Step1	Insert 2 rows into members table: INSERT INTO members(name, email, birthDate) VALUES('Bezzi', 'bezzi@example.com', NULL); INSERT INTO members(name, email, birthDate) VALUES('Begli', 'begli@example.com', '1999-03-06');	NA
Step2	Query data from the members table: SELECT * FROM members;	Table should contain 2 records, one of the record birthdate value should be NULL.
Step3	Finally query data from the reminders table: SELECT * FROM reminders;	Message Hi Bezzi, please update your date of birth.

Testing trigger		<i>Trigger 3-Type: Before Update</i>
Steps	Description & Query	Expected Result
Step1	Update the quantity of the row with id 1 to 150 UPDATE sales SET quantity = 150 WHERE id = 1; Query data from the sales table to verify update SELECT * FROM sales;	It should update sales table because the new quantity does not violate the rule.
Step2	Update the quantity of the row with id 1 to 500 UPDATE sales SET quantity = 500 WHERE id = 1;	Error Code : 1644. The new quantity 500 cannot be 3 times greater than the current quantity 150. In this case, the trigger should found the new quantity caused a violation and raised an error.

Testing trigger		<i>Trigger 4-Type: After Update</i>
Steps	Description & Query	Expected Result
Step1	Update the quantity of the row with id 1 to 350 UPDATE sales SET quantity = 350 WHERE id = 1; Query data from the SalesChanges table to verify update SELECT * FROM SalesChanges;	The trigger should triggered automatically.
Step2	Update the quantity of all 3 rows by increasing 10% UPDATE Sales SET quantity = CAST(quantity * 1.1 AS UNSIGNED);	NA
Step3	Query data from the SalesChanges table SELECT * FROM SalesChanges;	The trigger should fire three times because of the updates of the three rows

Testing trigger		<i>Trigger 5-Type: Before Delete</i>
Steps	Description & Query	Expected Result
Step1	Delete the row from salaries table DELETE FROM salaries WHERE employeeNumber = 1002; Query the data from SalaryArchives table SELECT * FROM SalaryArchives;	The trigger should invoke and insert a new row into the SalaryArchives table
Step2	Delete all the rows from salaries table DELETE FROM salaries; Finally, query the data from SalaryArchives table SELECT * FROM SalaryArchives;	The trigger should trigger 2 times because the DELETE statement deleted two rows from the Salaries table

Testing trigger		<i>Trigger 6-Type: After Delete</i>
Steps	Description & Query	Expected Result
Step1	Delete the row from salaries table DELETE FROM salaries WHERE employeeNumber = 1002; Query salary from SalaryBudgets table SELECT * FROM SalaryBudgets;	In the output, the total should be reduced by the deleted salary
Step2	Delete all the rows from salaries table DELETE FROM salaries; Finally, query the total from SalaryBudgets table SELECT * FROM SalaryBudgets;	The trigger updated the total to zero