

Triggers

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Practice 1

- Implement the following business rule with the help of a trigger named TR_CHECK_DEPT and a procedure named SECURE_DML. Changes to data in the dept table, will be allowed only in the month of March.
- Create a procedure called SECURE_DML that prevents the DML statement from executing in any other month than March. In case, a user tries to modify the table in any other month, the procedure should display a message "You can modify or add a department only at the end of a financial year"
- Create a statement level trigger TR_CHECK_DEPT on the dept table that calls the above procedure.
- Test it by inserting a new record in the dept table.

Practice 2

- Enforce referential integrity with a trigger named TR_CASCADE_CHANGE. When the value of DEPTNO changes in the Dept table, cascade the update to the corresponding rows in the EMP table.
- Test it by updating the value of a deptno from the dept table.

Practice 3

- Create a trigger named TR_CHECK_COMM to implement the following business rule. In EMP table, employee having job as 'Salesman' should receive a commission. A Salesman must receive a commission of not less than Rs. 100. Employees who are not sales persons are not entitled to get commission (comm value should be NULL).
- Test it by inserting a record in the emp table.

Practice 4

- While modifying the EMP table, ensure that the salary is in the valid range as specified in the SALGRADE table (between lowest losal and highest hisal) with the help of a trigger named TR_VALIDATE_SAL.
- Test it by updating the salary value of an existing record in the emp table.

Practice 5

- Create a table named salaryLog with the appropriate columns and insert the empno, new grade, old salary and new salary values in salaryLog table if the grade of an employee changes.
- Create a trigger named TR_CHECK_GRADE that will be fired when a user modifies the EMP table. It will check whether the grade has changed by making use of the SALGRADE table. (Grade is dependent on Salary.) If grade is changed, the trigger will log the corresponding employee number, old salary, new salary and new grade into salaryLog table.
- Test the working of the trigger by firing an appropriate DML query.

Mutating Table Error Workaround

Practice 6

- Create triggers named TR_RESTRICT_STRENGTH and TR_LIMIT_ANALYSTS respectively, on emp table, to implement the following business rules
 - a) There can not be more than 5 employees in department number 30
 - b) There can not be more than 4 ANALYSTS in the organization (There can not be more than 4 records in the emp table with the job ANALYST)
- Fire appropriate DML queries to check the working of the triggers