

Write a before trigger for Insert, update event considering following requirement: Emp(e_no, e_name, salary) I) Trigger action should be initiated when salary is tried to be inserted is less than Rs. 50,000/- II) Trigger action should be initiated when salary is tried to be updated for value less than Rs. 50,000/- Action should be rejection of update or Insert operation by displaying appropriate error message. Also the new values expected to be inserted will be stored in new table Tracking(e_no, salary).

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Step 1: Create the Tracking Table

First, create the Tracking table where you will store the new values that are rejected:

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```
CREATE TABLE Tracking (  
    e_no NUMBER,  
    salary NUMBER  
);
```

Step 2: Create the Before Insert/Update Trigger

Now, you can create a trigger that will fire before an insert or update on the Emp table. If the salary is less than Rs. 50,000, it will insert the attempted values into the Tracking table and raise an exception to reject the operation.

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```
CREATE OR REPLACE TRIGGER trg_Before_Insert_Update_Emp  
BEFORE INSERT OR UPDATE ON Emp  
FOR EACH ROW  
DECLARE  
    v_msg VARCHAR2(255);  
BEGIN  
    -- Check for salary condition for INSERT  
    IF INSERTING THEN  
        IF :NEW.salary < 50000 THEN  
            v_msg := 'Insert operation rejected: Salary cannot be less than Rs. 50,000.';  
            INSERT INTO Tracking (e_no, salary) VALUES (:NEW.e_no, :NEW.salary);  
            RAISE_APPLICATION_ERROR(-20001, v_msg);  
        END IF;  
    END IF;
```

```

END IF;

-- Check for salary condition for UPDATE
IF UPDATING THEN
    IF :NEW.salary < 50000 THEN
        v_msg := 'Update operation rejected: Salary cannot be less than Rs. 50,000.';
        INSERT INTO Tracking (e_no, salary) VALUES (:NEW.e_no, :NEW.salary);
        RAISE_APPLICATION_ERROR(-20002, v_msg);
    END IF;
END IF;

END;
/

```

Explanation of the Trigger

1. Trigger Name and Timing:

- The trigger is named `trg_Before_Insert_Update_Emp` and it executes before an insert or update operation on the `Emp` table.

2. Check for Salary:

- The trigger checks if the operation is an insert or update using the `INSERTING` and `UPDATING` keywords.
- If the new salary (`:NEW.salary`) is less than Rs. 50,000, it prepares an appropriate error message.

3. Insert into Tracking Table:

- Before raising the error, the trigger inserts the employee number and salary that triggered the rejection into the `Tracking` table.

4. Error Handling:

- The trigger uses `RAISE_APPLICATION_ERROR` to throw an error with a specific message, effectively rejecting the operation. The error numbers -20001 and -20002 are custom application error codes, which can be adjusted as needed.

Important Notes

- Ensure that the column names and data types in the `Emp` table correspond to those used in the trigger.
- This trigger will help maintain data integrity by preventing employees from having a salary lower than Rs. 50,000 and providing a log of rejected attempts in the `Tracking` table.

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