

Create Trigger for Employee Table

1.Create a Database

```
create database ZESAM;
```

2.Select the Database

```
use ZESAM;
```

3.Create a Table

```
CREATE TABLE EMPLOYEE (
    SSN      VARCHAR(10) PRIMARY KEY,
    FNAME    VARCHAR(20),
    LNAME    VARCHAR(20),
    SALARY   DECIMAL(10,2),
    SUPERVISOR_SSN VARCHAR(10),
    CONSTRAINT fk_supervisor
        FOREIGN KEY (SUPERVISOR_SSN)
        REFERENCES EMPLOYEE(SSN)
);
```

4.Insert Data into Table:

```
INSERT INTO EMPLOYEE (SSN, FNAME, LNAME, SALARY, SUPERVISOR_SSN)
VALUES ('S100', 'Alice', 'Smith', 60000, NULL);
```

```
INSERT INTO EMPLOYEE (SSN, FNAME, LNAME, SALARY, SUPERVISOR_SSN)
VALUES ('E101', 'Bob', 'Johnson', 50000, 'S100');
```

```
INSERT INTO EMPLOYEE (SSN, FNAME, LNAME, SALARY, SUPERVISOR_SSN)
VALUES ('E102', 'Charlie', 'Brown', 55000, 'S100');
```

5.Create Trigger using before update on

```
DELIMITER $$

CREATE TRIGGER salaryViolation_update1123
BEFORE UPDATE ON EMPLOYEE
FOR EACH ROW
BEGIN

DECLARE sup_salary DECIMAL(10,2);
DECLARE msg VARCHAR(255);

IF NEW.SUPERVISOR_SSN IS NOT NULL THEN
    SELECT SALARY INTO sup_salary
    FROM EMPLOYEE
    WHERE SSN = NEW.SUPERVISOR_SSN;

    IF NEW.SALARY > sup_salary THEN
        SET msg = CONCAT('Salary violation: Employee ', NEW.SSN,
                         ' has higher salary than Supervisor ', NEW.SUPERVISOR_SSN);
        SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = msg;
    END IF;
END IF;

END$$

DELIMITER ;
```

6. Create Trigger using before insert on

```
DELIMITER $$

CREATE TRIGGER salaryViolation_insert
```

```

BEFORE insert ON EMPLOYEE
FOR EACH ROW
BEGIN
    DECLARE sup_salary DECIMAL(10,2);
    DECLARE msg VARCHAR(255);

    IF NEW.SUPERVISOR_SSN IS NOT NULL THEN
        SELECT SALARY INTO sup_salary
        FROM EMPLOYEE
        WHERE SSN = NEW.SUPERVISOR_SSN;

        IF NEW.SALARY > sup_salary THEN
            SET msg = CONCAT('Salary violation: Employee ', NEW.SSN,
                ' has higher salary than Supervisor ', NEW.SUPERVISOR_SSN);
            SIGNAL SQLSTATE '45000' SET MESSAGE_TEXT = msg;
        END IF;
    END IF;
END$$

DELIMITER ;

```

7. Insert the data- salary greater than 60000

```

INSERT INTO EMPLOYEE (SSN, FNAME, LNAME, SALARY, SUPERVISOR_SSN)
VALUES ('E102', 'Charlie', 'Brown', 85000, 'S100');

```

8. Update the data-salary greater than 60000

```
UPDATE EMPLOYEE
```

```
SET SALARY = 70000
```

```
WHERE SSN = 'E101';
```