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Section 1B

Homework 3

1. a.   CHECK (weight <= 5)

   b.   CREATE TRIGGER check_weight
          AFTER INSERT ON Laptop
          REFERENCING NEW ROW AS nrow
          FOR EACH ROW
          WHEN (nrow.weight > 5)
          BEGIN
          UPDATE Laptop
          SET weight = NULL
          WHERE model=nrow.model
          END

2. (1,8), (100,0), (100,0)

3. a.   CREATE VIEW DeptInfo AS
          SELECT dept, avg(salary) avgsalary FROM Employees
          GROUP BY dept

          CREATE VIEW EmployeeNames AS
          SELECT ename FROM Employees

   b.   SELECT for DeptInfo and SELECT, DELETE for EmployeeNames

   c.   He could see individual salaries only if he decides to "fire" every single
          person except for one person. Then that person's salary would show up in
          DeptInfo.

   d.   INSERT INTO DeptInfo VALUES('Computer Science', 999999);

   e.   GRANT SELECT, UPDATE ON Employees TO Joe WITH GRANT
          OPTION
          GRANT SELECT, UPDATE ON EmployeeNames TO Joe WITH GRANT
          OPTION

          He should not be able to see DeptInfo since we didn't grant SELECT on it

f.	REVOKE SELECT ON EmployeeNames FROM Joe CASCADE

This should remove AllNames since it is dependent on EmployeeNames.

4. Since this query computes the union of 8 different groupings of Sales, we can just multiply all the possibilities for each column including the option 'all'. So we just multiply item_name (5) * color (4) * clothes_size (4) = 80 tuples