Homework #4
Due: February 18, 2015

A. Consider the following relational schema:

Salerep(sales_rep_ID, name, address, commission, rate)
Customer(Customer_number, name, address, balance, credit_limit, sales_rep_ID)
Part(part_number, part_description, on_hand, class, warehouse, price)
Orders(order_number, order_date, customer_number)
Orderline(order_number, part_number, number_order)

Write SQL statements for the following queries:

1. Produce a list showing part_number, part_description, on_hand, and price sorted by part_description.
2. List customer’s name followed by order_number, part_description, and number_order.
3. List names of customers who have ordered the most expensive item.
4. List the names of the sale_reps who have sold the most number of part “123”.
5. Write SQL assertion for the following constraint: “Customers are not allowed to order more than 10 units of the same item on any one day.”

B. Consider the following relational schema:

Employee(eid, ename, age, salary)
Department(did, dname, budget, mgrid)
Works(eid, did, pct_time)

An employee can work in more than one department; the pct_time field of the Works relation shows the percentage of time that a given employee works in a given department. Write an SQL trigger to express the following constraint: “Whenever an employee is given a raise, the manager’s salary must be increased to be at least as much.” (increasing a manager’s salary to be equal to the employee who received the raise, if the manager’s salary is less than the employee’s new salary)