Last Digit of your NUID: 0 or 4

Your NUID:
Your Name:

Question 1 (6 points)

The Wang Craft Shop is a small business that sells materials to people who want to embark on a crafting project.

From the above business scenario of the Wang Craft Shop, please design a relational database to track:

1) Customer's purchase (order)
2) Suppliers
3) Items stocked. Stocked items are all categorized.
4) The details of a category is also tracked.
5) Customers
6) Employees who process a customer's purchase (order)

Normalize the design to the 3rd normal form. Create the ERD in your design tool. Submit the ERD.

Question 2 (3 points)

Our data usage pattern is to review a salesperson's complete sales history frequently. Please use the embedding design technique to design a MongoDB database reflecting the data provided below.

SalesPersonID	FirstName	LastName	SalesOrderID	ProductID	Name
279	Tsvi	Reiter	43684	763	Road-650 Red, 48
279	Tsvi	Reiter	43685	765	Road-650 Black, 58
279	Tsvi	Reiter	43685	763	Road-650 Red, 48

```
-- Your NUID:
-- Your Name:

-- Question 3 (3 points)

/* Using the content of AdventureWorks2008R2, write
   a query to retrieve the customers who have purchased
   more than ten different products and never purchased
   the same product for all the orders.

   Sort the returned data by the total number of different
   products purchased by a customer in the descending order.

   Include the customer id and the total number of different
   products purchased by a customer in the report. */




-- Question 4 (3 points)

/* Using AdventureWorks2008R2, write a query to retrieve the salesperson
   who has the largest total sold quantity of products in black
   during the fourth quarters of 2005, 2006 and 2007 combined.

   Include the salesperson id and the total sold quantity of products
   in black in the returned data. */
```