1. *Hay Nursery is a small business that sells material for home-owners who want to embark on home-landscaping projects. Typical items sold at Hay Nursery include the following:*

* Plants, Bulbs, Evergreen trees up to 6’, Seedlings, Shrubs
* Soil (fertilizer, top soil, mulch, bark, peat moss and the like)
* Tools (rakes, hoes, clippers, wheel barrels and such)
* Fixtures (sheds, compost bins, screens and such)
* Step-by-Step ‘How to’ books
* Patio furniture
* Bricks, pavers, decorative rocks

From the above business scenario of Hay Nursery, please create a logical data model to track orders, vendors, items stocked, customers and employees. Do not include accounting/payroll.

1. Husky Gym is an athletics facility in the University District that offers monthly memberships for weight-training to students, staff and faculty. The following are facts established in a preliminary phone interview with the owners:

* There are 11 certified Nutrition and Athletic Well-Being Advisors on staff.
* In addition to a full-size basketball court and an Olympic-grade lap pool, there are 57 independent exercise machines as well as over 85,000 pounds in free-weights.
* There is a gender-neutral sauna and free towel service after 3:00 PM on week days
* The facility has 4 racquetball courts that can be converted to pickle ball if reservations are made a day prior
* The 25-bike spin room and yoga floor has a side-entrance to Brooklyn Avenue.
* Anyone registering for the 3-month Yoga for Life and Beauty class is eligible for complimentary child-care at ‘Teeny-Toddlers’ across the street.

The owners of Husky Gym would like a database designed to keep track of staff, members, their visits, exercise equipment, all maintenance and any incidents arising during operating hours. One of their primary goals is to lower the occurrence of injuries related to faulty equipment. Design a database ERD in 3NF that will allow them to better operate the business. Do not include payroll or accounting.

1. You have been hired by DataCakes to build a database to organize their business space. DataCakes is the market leader in cooking and distribution of cupcakes. They have various styles of cupcakes and sell to independent stores and in major metropolitan markets across North America. After interviewing the CEO (Ms. Hostess ‘Twinkie’ Sugarbomb), it is determined the following aspects of the company are considered critical:

• The four baking plants operate only 6 days a week due to recent labor contract

• Organic sugar cane will replace processed brown sugar in all ClusteredCakes by January 2017

• Safeway will begin licensing and producing Chocolate Memory Cakes in June 2017

• The chilling cycle for Strawberry Backup is to be increased by 15 minutes

• There are 3 types of customers: online, wholesale and licensed-partner

• Products are divided into three categories: Organic, Obese and Adolescent-Diabetic

• Suppliers and Employees are local to each baking plant

• All deliveries will be conducted by independent contract drivers due to insurance increases

They need to store information regarding their employees, customers, suppliers, cooking processes and equipment. They also need to store information about the ingredients - both which vendors sell them and which products use them.

Please draft an ERD for DataCakes. Emphasis should be on proper PK/FK, recognition of appropriate business objects and accurate relationships. Do not include accounting/payroll.