- 1. UPS prides itself on having up-to-date information on the processing and current location of each shipped item. To do this, UPS relies on a company-wide information system. Shipped items are the heart of the UPS product tracking information system. Shipped items can be characterized by item number (unique), weight, dimensions, insurance amount, destination, and final delivery date. Shipped items are received into the UPS system at a single retail center. Retail centers are characterized by their type, uniqueID, and address. Shipped items make their way to their destination via one or more standard UPS transportation events (i.e., flights, truck deliveries). These transportation events are characterized by a unique scheduleNumber, a type (e.g, flight, truck), and a deliveryRoute. Please create an Entity Relationship diagram that captures this information about the UPS system. Be certain to indicate identifiers and cardinality constraints.
- 2. Consider the ER diagram in the figure. Assume that an employee may work in up to two departments or may not to assigned to any department. Assume that each department must have one and may have up to three phone numbers.

  EMPLOYEE

  DEPARTMENT

in

**PHONE** 

Contain

Has

phone

Supply (min,max) constraints on this diagram (on each relation.) State any additional assumptions you make.