

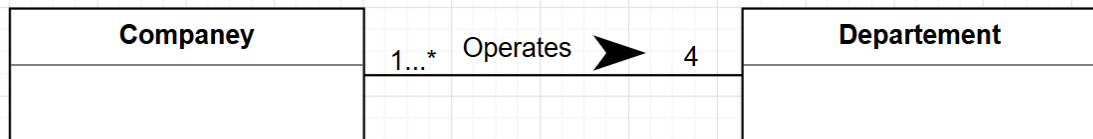
## Lab 6

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1. **Gains, Inc. is a LLC that owns many companies. Create an ER diagram for each of the following descriptions:**

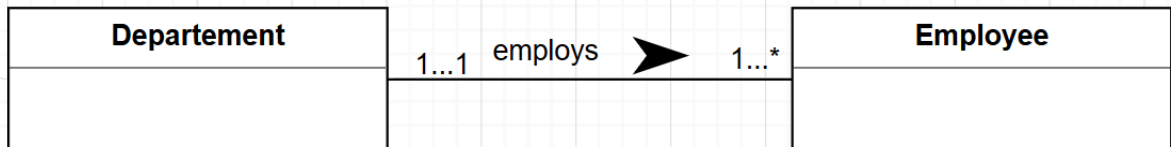
- a. Each company operates four departments, and each department belongs to one company.

ANS:



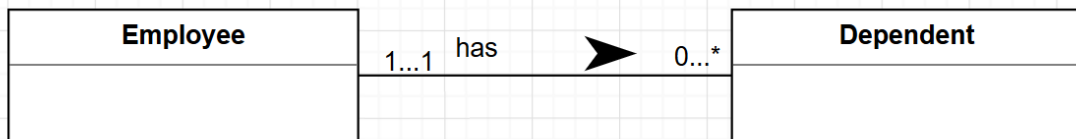
- b. Each department in part (a) employs one or more employees, and each employee works for one department.

ANS:



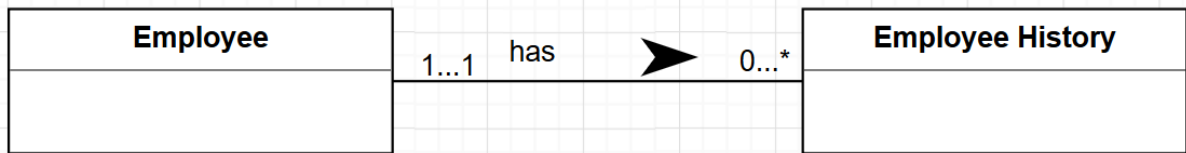
- c. Each of the employees in part (b) may or may not have one or more dependents, and each dependent belongs to one employee.

ANS:



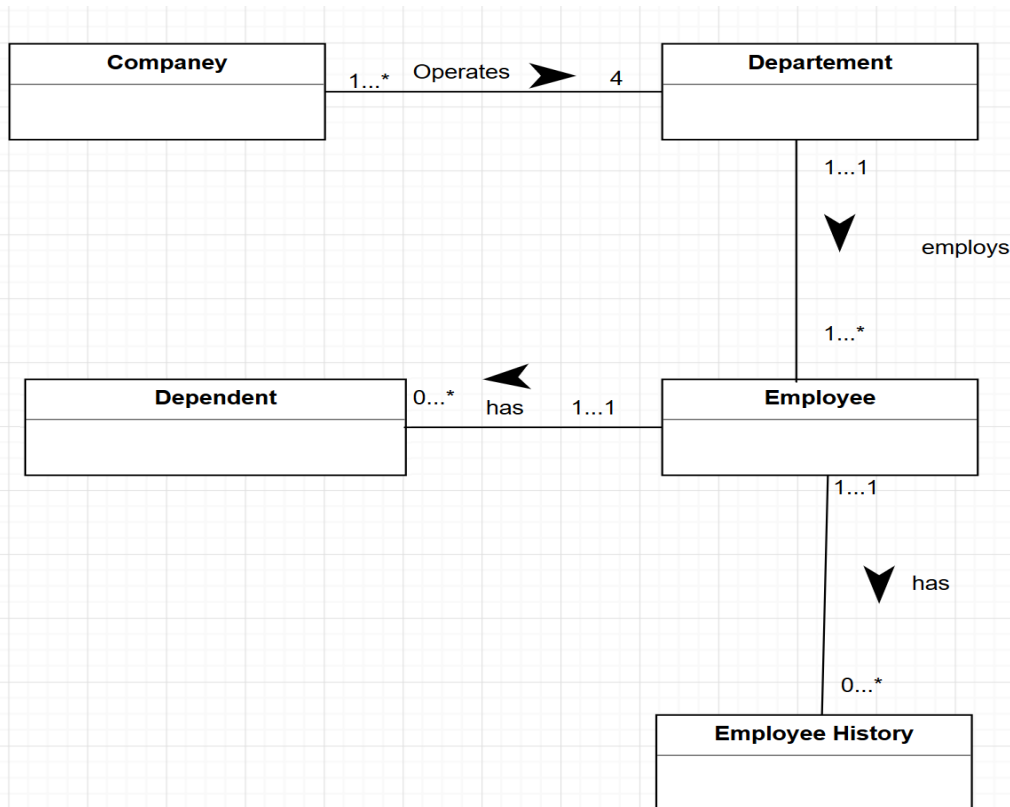
- d. Each employee in part (c) may or may not have an employment history.

ANS:



- e. Represent all the ER diagrams described in (a), (b), (c), and (d) as a single ER diagram.

ANS:

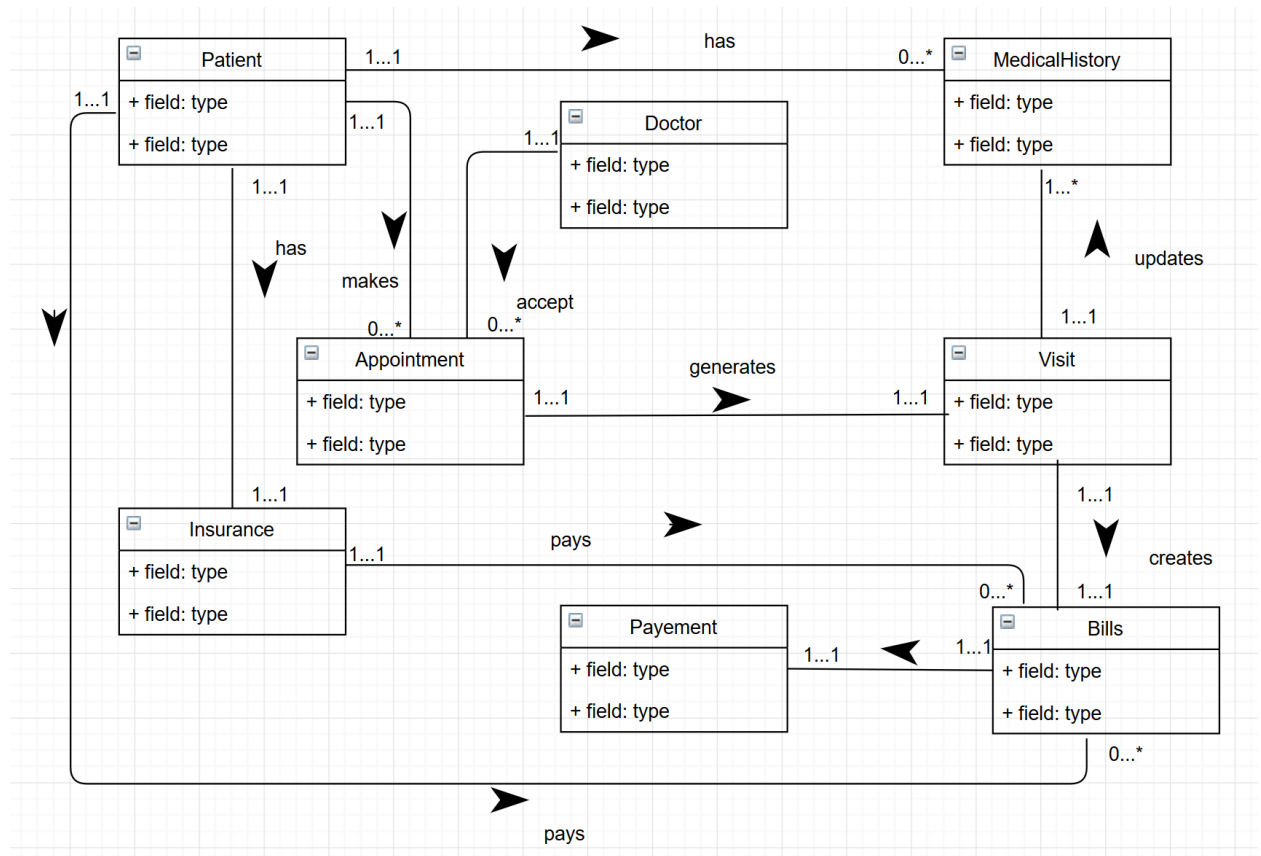


## 2. Create an ER model based on the following descriptions.

1. A patient can make many appointments with one or more doctors in the clinic and a doctor can accept appointments with many patients. However, each appointment is for a patient and is with one doctor.
2. If kept, an appointment yields a visit with the doctor specified in the appointment and that in turn results in a diagnosis and, when appropriate, treatment.
3. Each visit updates the patient's medical history.
4. Each visit creates a bill.
5. A bill may be paid in many installments. However, each payment is properly recorded.

6. A patient can make payment by himself or through insurance company. If the insurance company pays, patient is responsible for the deductibles only.

ANS:



3. Solve exercise 12.12 from the 6<sup>th</sup> edition (page 383). If time permits, solve from a-f. Otherwise, it's ok if you just solve f.

ANS:

