

Q1. Draw an ER Diagram for a real estate firm that lists property for sale. The following describes this organization:

- The firm has a number of sales offices in several states. Attributes on sales office include office number (identifier) and Address.
- Each sales office is assigned one or more employees. Attributes of employee include Employee_Id (identifier) and employee name. An employee must be assigned to only one sales office.
- For each sales office, there is always one employee assigned to manage that office. An employee may manage only the sales office to which he/she is assigned.
- The firm lists property for sale. Attribute on property include Property_Id (identifier) and location. Components of location include Address, city, state and zip_code.
- Each unit of property must be listed with one (and only one) of the sales offices. A sales office may have any number of properties listed, or may have no properties listed.
- Each unit of property has one or more owners. Attributes of owners are Owner_Id (identifier) and Owner_name. An owner may own one or more units of property. An attribute of the relationship between property and owner is Percent_Owned.