

## Case 1

**A big company has decided to store information about its projects and employees in a database. The company has wisely chosen to hire you as a database designer. Prepare an E-R diagram for this Company according to The following Description:**

- The company has a number of employees each employee has SSN, Birth Date, Gender and Name which represented as Fname and Lname.
- The company has a set of departments each department has a set of attributes DName, DNUM (unique) and locations.
- Employees work in several projects each project has Pname, PNumber as an identifier, Location and City.
- Each employee may have a set of dependent; each dependent has Dependent Name (unique), Gender, and Birth Date.  
Note: if the employee left the company no needs to store his dependents info
- For each Department, there is always one employee assigned to manage that Department and each manager has a hiring Date
- Department may have employees but employee must work on Only One department
- Each department may have a set of projects and each project must assigned to one department
- Employees work in several projects and each project has several employees and each employee has a number of working hours in each project
- Each employee has a supervisor