

Exercise 3.1

(practical part)

Exercise 3.2

Entities:

- Supplier(SName)
- Company(CName)
- Department(DName, ENo Budget)
- Head of Department(ENo, DName, Bonus) (Vertical partitioning) or Head of Departement(ENo, EName, ESalary, Bonus) (Horizontal partitioning)
- Employee(ENo, EName, ESalary)

Relations:

- has(SName, CName)
- owns(DName, CName)
- affiliated(PCName, SCName, Percentage)
- works(ENo, DName)
- leads() is not needed because it has a (1,1) relation to both Entities and can be implemented by using foreign keys in Department and Head of Department.

Exercise 3.3

- Employee(ENo, OfficeNo, BuildingID, EName, ESalary, DNAME??)
- Building(BuildingID)
- Office(OfficeNo, BuildingID)