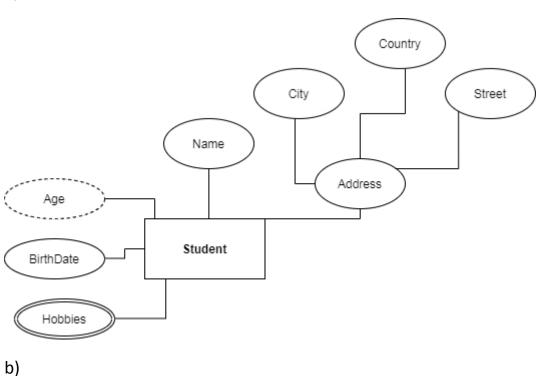
# Laboratory work № 4

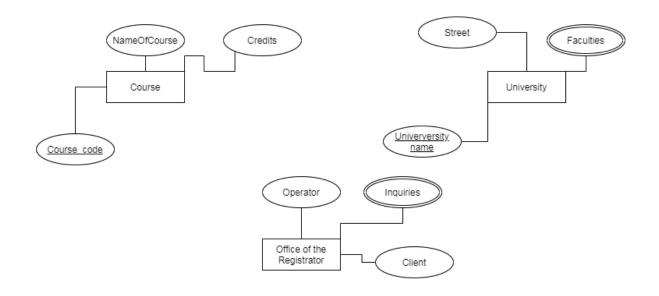
#1

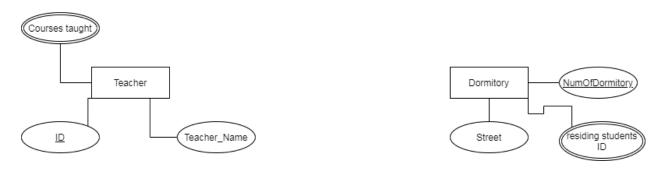
- a) All the main phases:
  - The data needs of the database users phase
    We need to find out what their users need a database for.
  - Choosing a data model phase
    Applying the concepts, we create tables, relationships between tables.
  - The implementation of the database phase
    We have to decide which DBMS we need. The possibility to get money. Enterprise implementation
- b) ER model can highlight key entities and indicate the relationships that can be established between these entities.

#2

a)

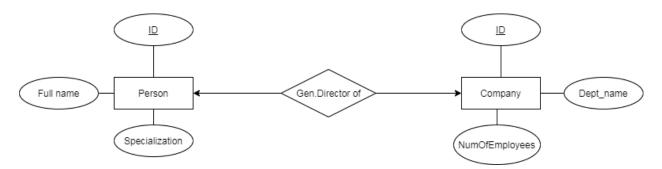




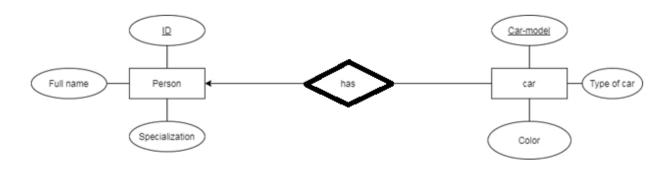


#3

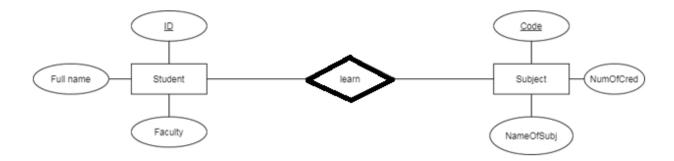
#### One-to-one:



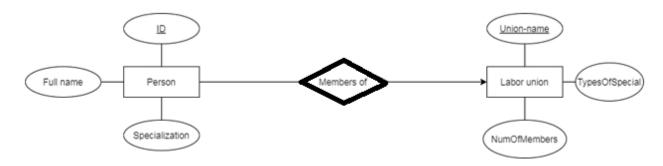
#### One-to-many:



#### Many-to-many:



## Many-to-one:



### #4

