1.

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This phase consists of three parts:

1. Conceptual design
2. Logical design
3. Physical design

b) What is the entity-relationship (ER) data model?

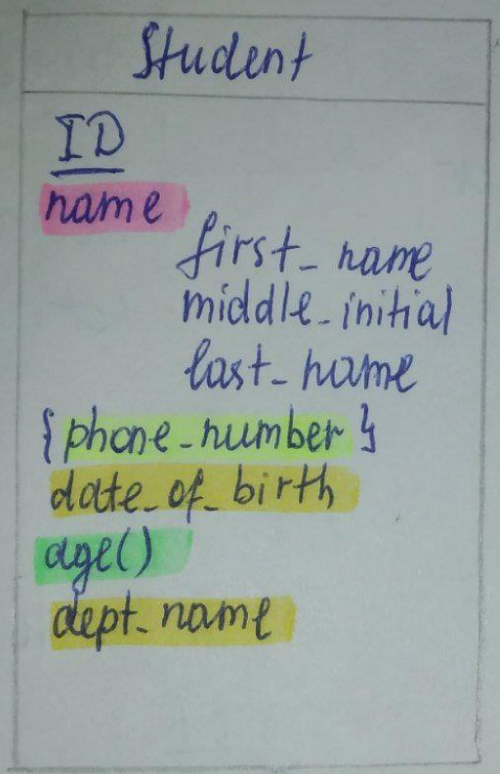
Entity Relationship Model (ER Modeling) is a representation of a database in the form of graphical diagrams. ER model visualizes a process that defines a certain subject area. Relationship diagram is graphically represents entities, attributes, relationships.

2.

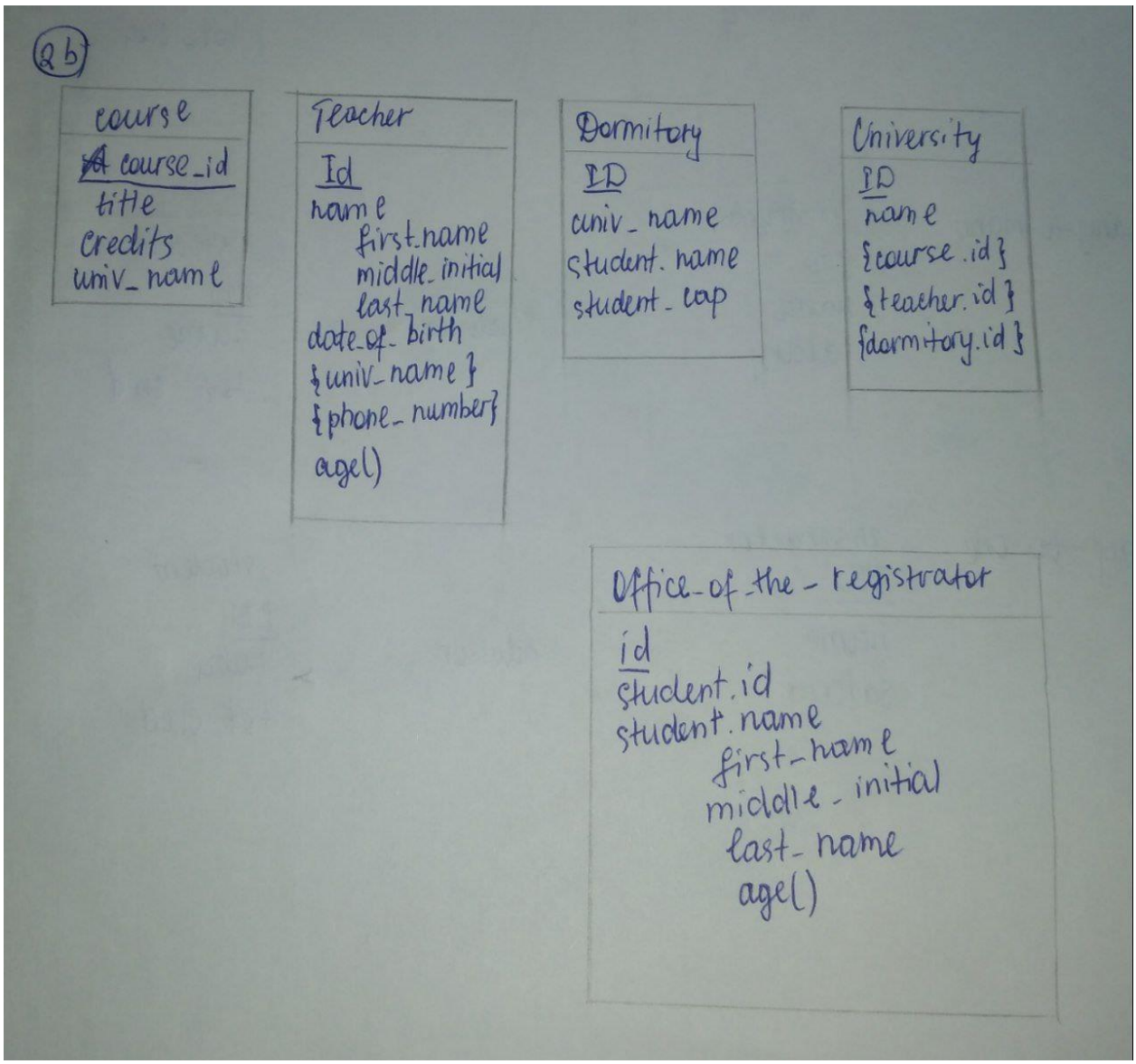
a) Create entity **"Student"** with at least **5 attributes** (One for each type of attribute: **simple, composite, derived, multivalued**)

b) Create entities **"University", "Course", "Dormitory", "Teacher", "Office of the Registrar"** with at least 3 attributes each. (Entity types should be correct on data model)

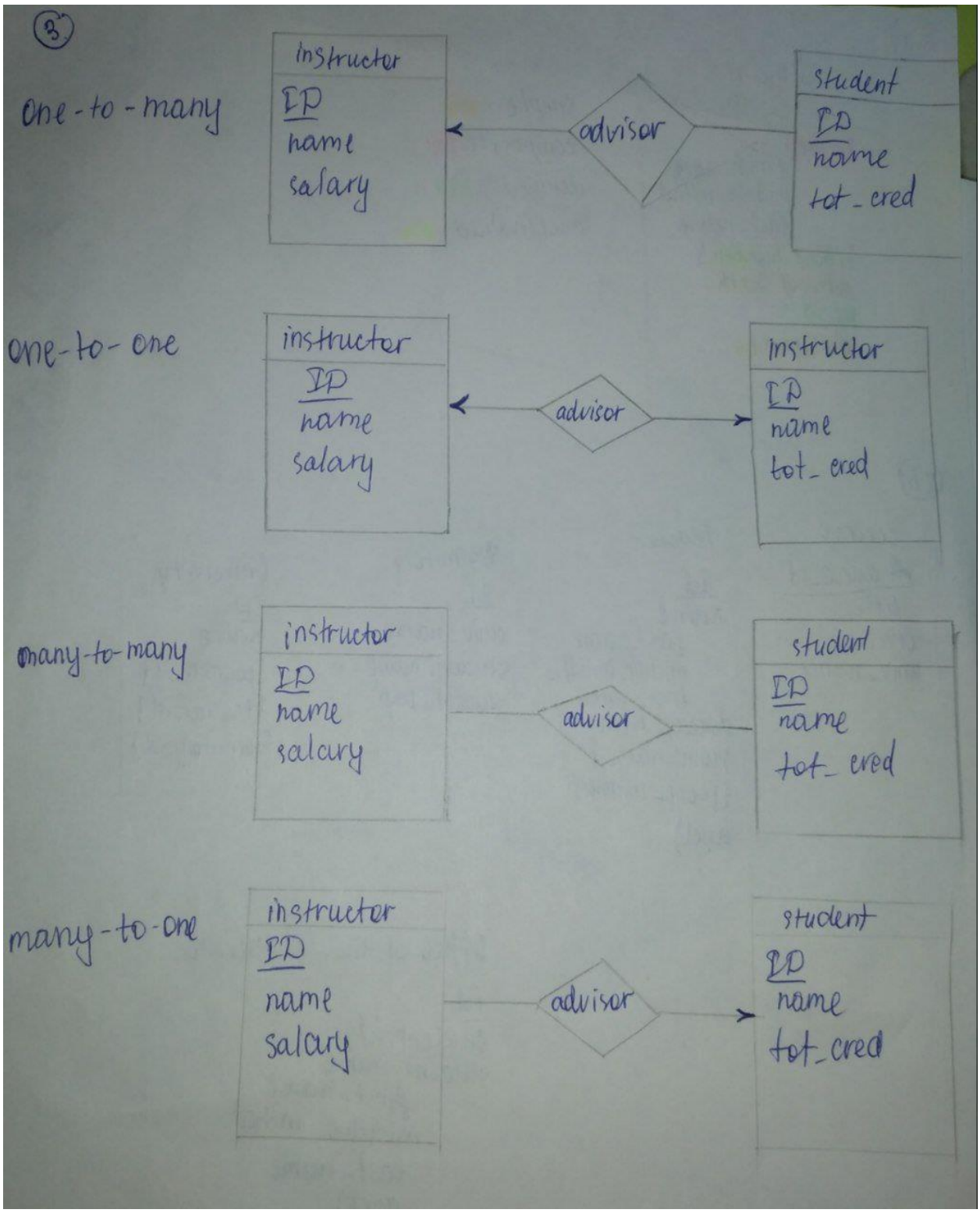
2 a)



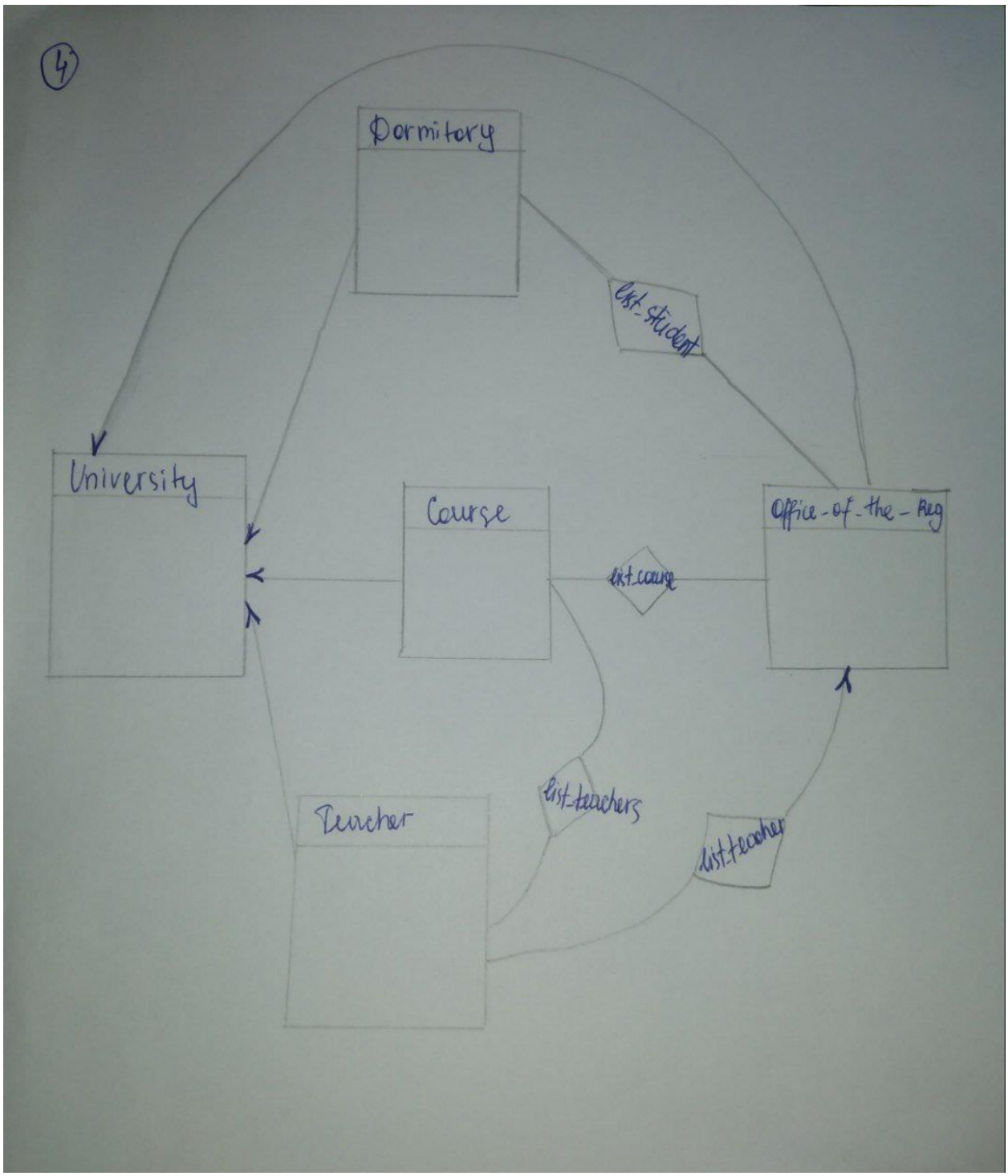
simple
composite
derived
multivalued



3. Give examples for **one-to-many, one-to-one, many-to-many, many-to-one** relations. (Draw the examples as a scheme)



4. Create ER data model with relations using data from the second task.


4
Dormitory
List_student
University
Course
Office_of_the_Reg
List_course
List_teachers
Teacher
List_teacher