Design phases

1st - characterize fully the data needs of the prospective database users

2nd - choosing a data model:

- Applying the concepts of the chosen data model

Translating these requirements into a conceptual schema of the database.

Describe the kinds of operations (or transactions) that will be performed on the data.

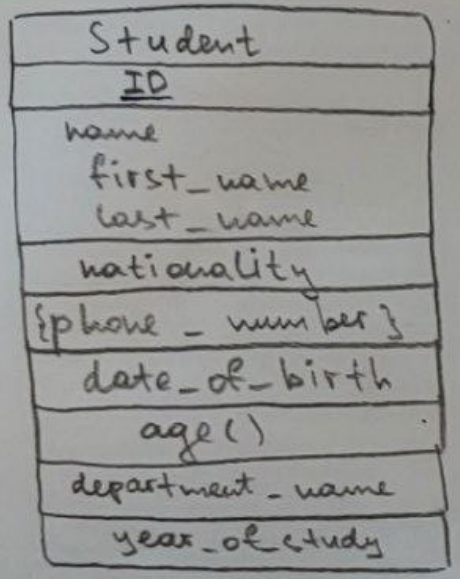
3rd - implementation of the database:

Logical Design –Deciding on the database schema:

- Database design requires that we find a “good” collection of relation schemas.
- Business decision –What attributes should we record in the database?
- Computer Science decision –What relation schemas should we have and how should the attributes be distributed among the various relation schemas?

Physical Design – Deciding on the physical layout of the database

2) a)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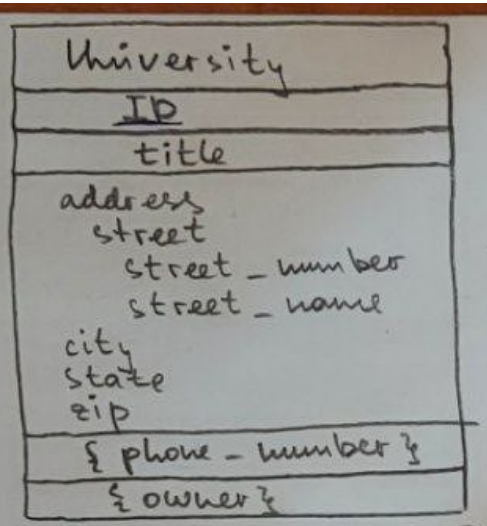
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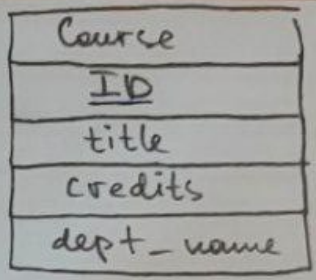
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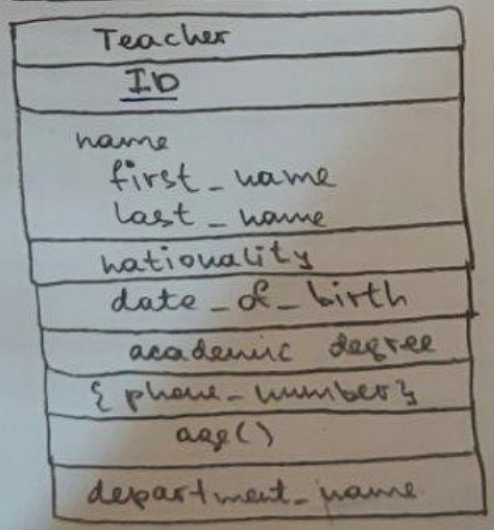
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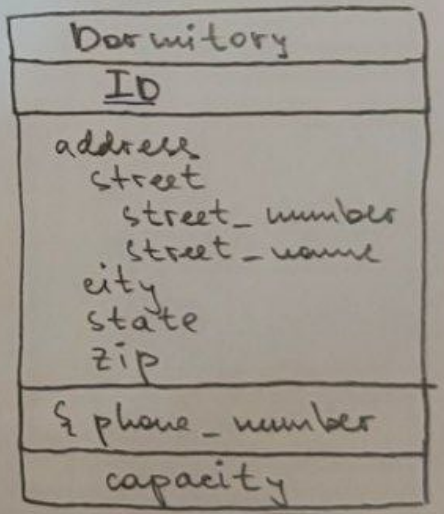
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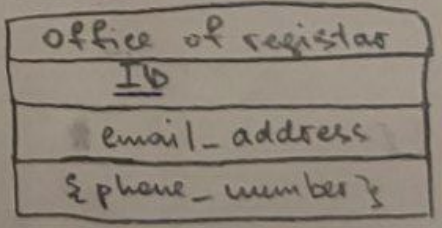
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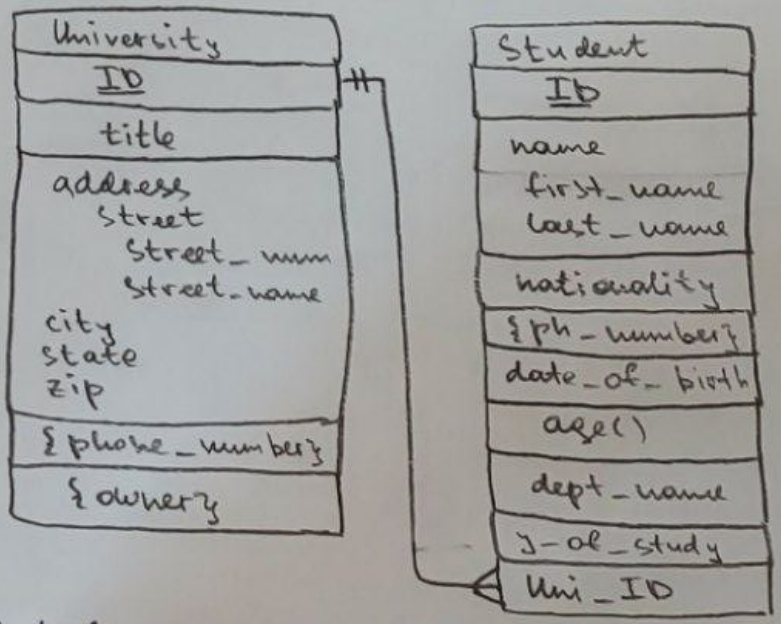


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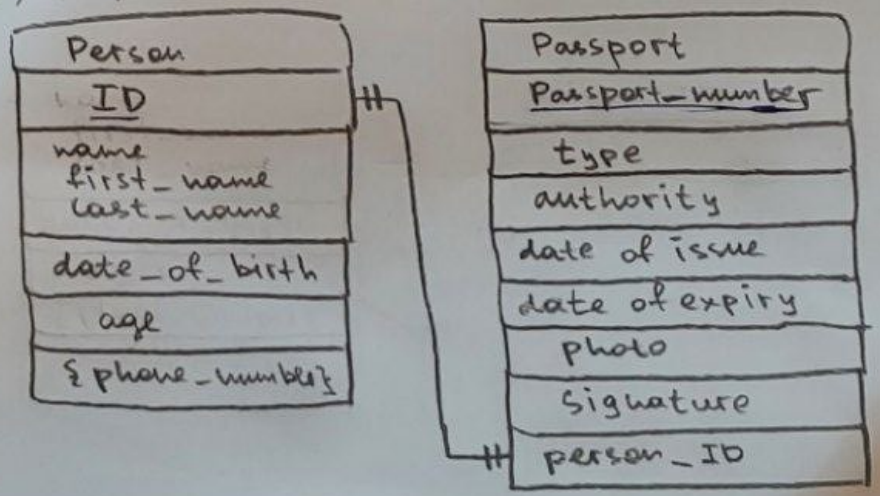


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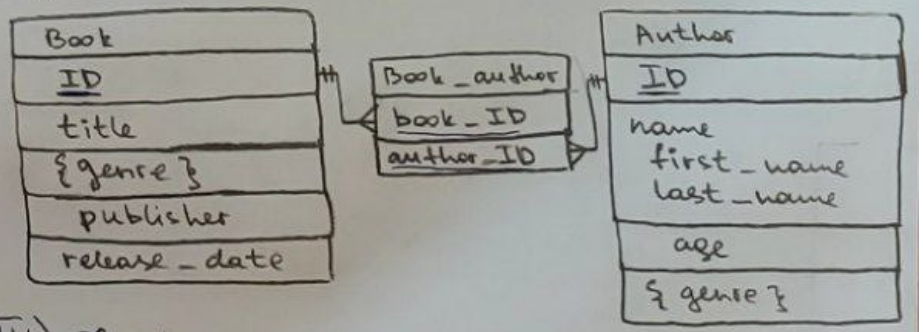


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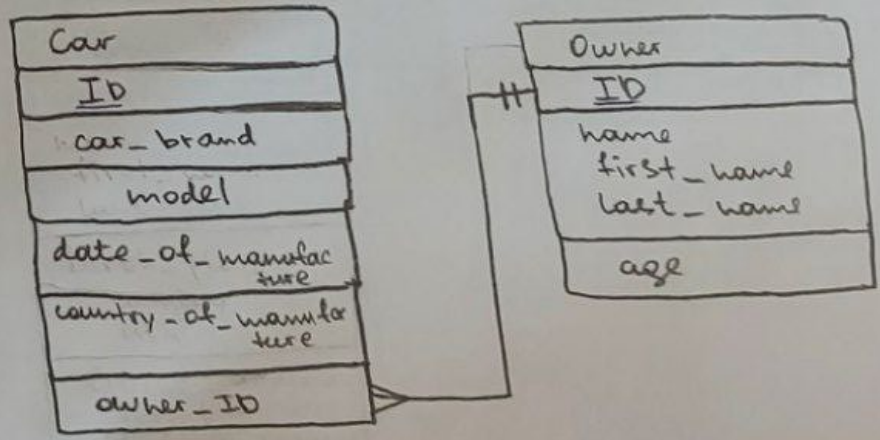

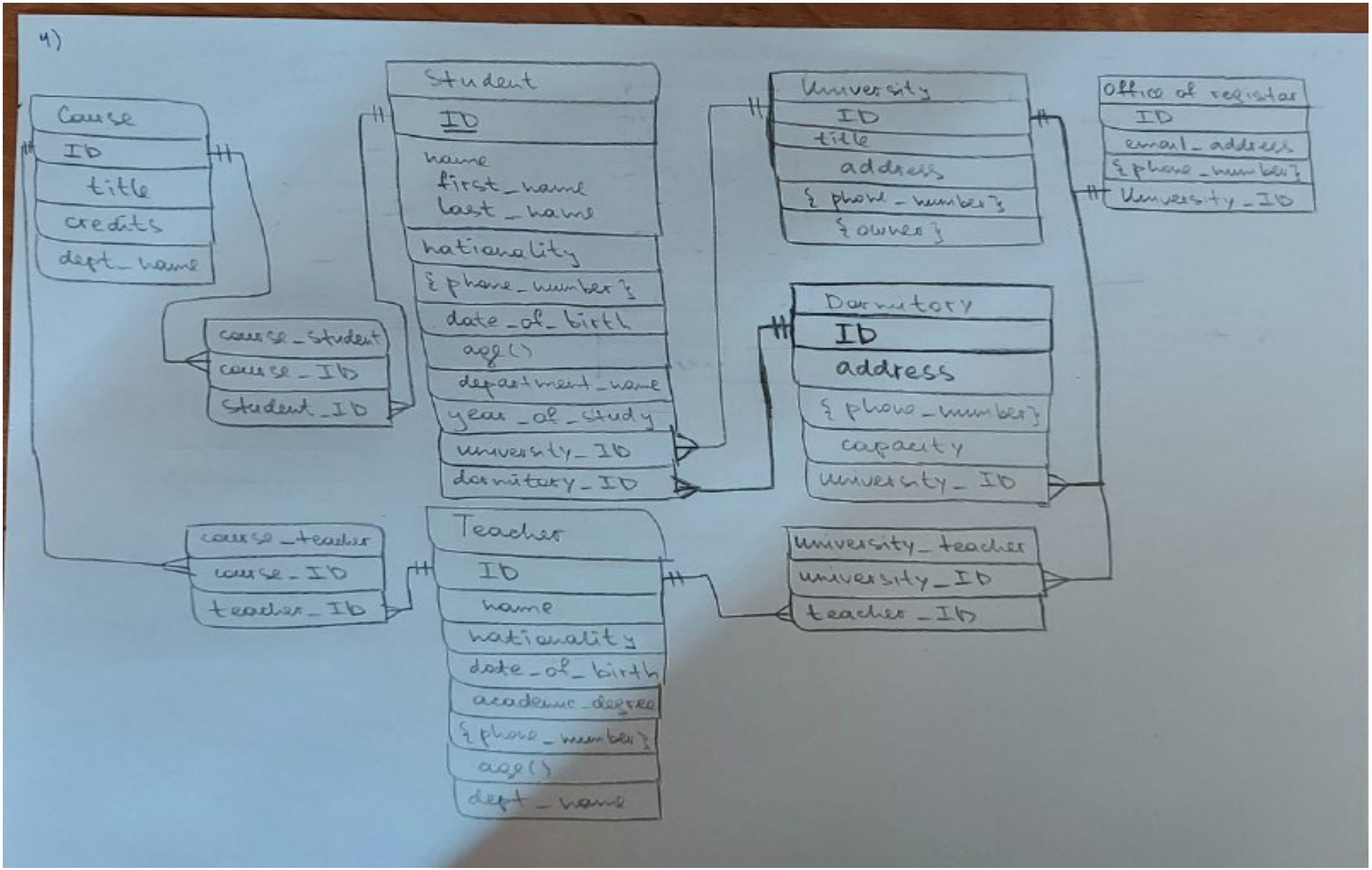
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credits
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Student
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department_name
year_of_study
university_ID
dormitory_ID
University
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course_student
course_ID
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Dormitory
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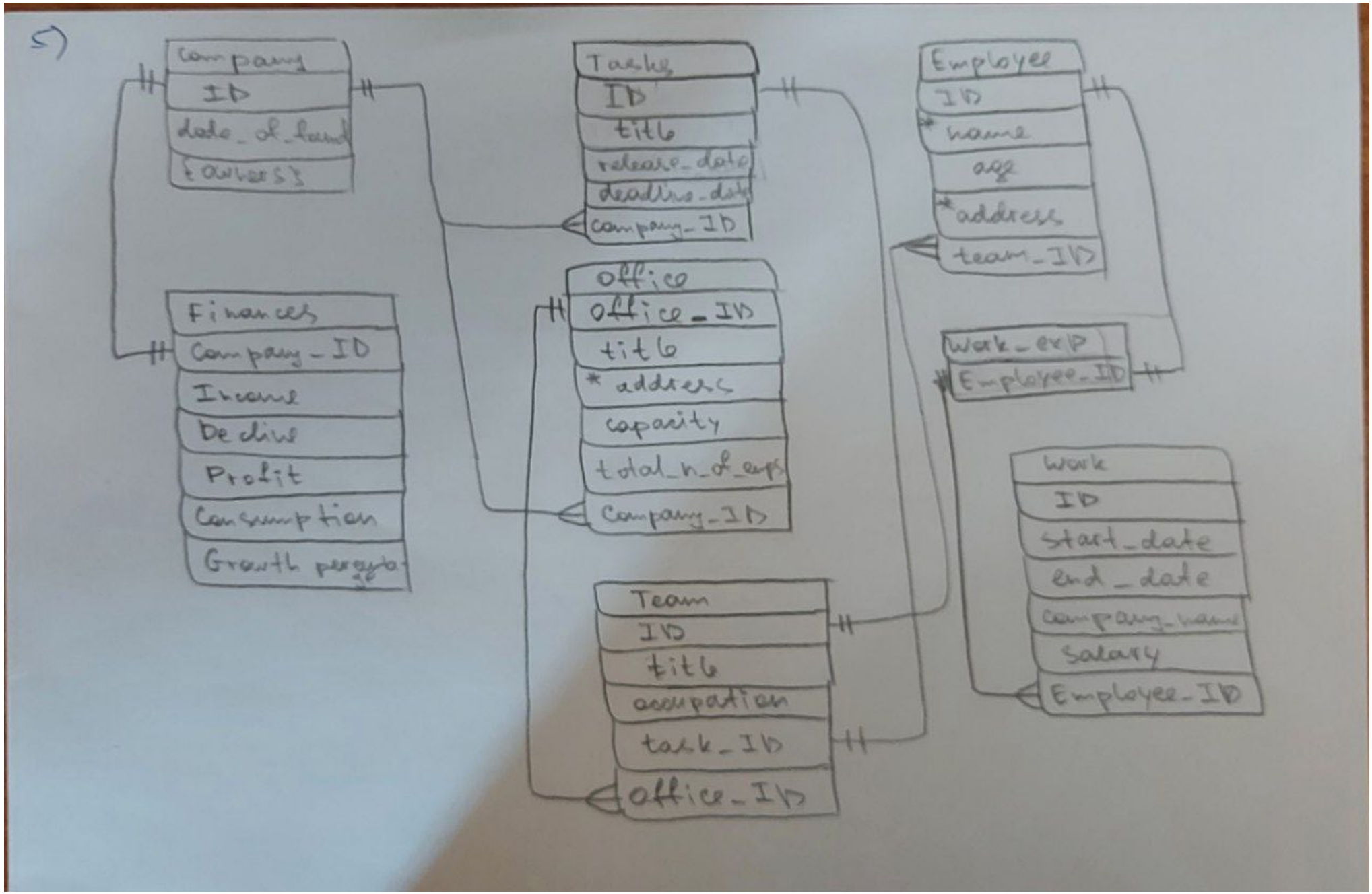
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