

HOMEWORK -2-

Note if you do not attend the scheduled session, your homework must include the extra queries to gain a grade.

Homework MUST be handed in via Canvas ONLY and in the correct assignment folder, in one file representing the entire homework.

<https://kth.instructure.com/courses/4608/assignments/19914>

Your name, group number must be included in the document.

Homework exercise:

Study the Northshore Hospital case study file available on Canvas

- (a) Identify primary keys and foreign keys for the entire case study.
- (b) For the Wards section only, identify all entity types, attributes, relationship types and their degrees in the following case.
- (c) For the Wards section only, identify the main relationship types and specify the multiplicity for each relationship. State any assumptions you make about the data.
- (d) Produce some sample tables for these relations that observe the relational integrity rules. Suggest some general constraints that would be appropriate for this schema.

Extra queries:

- (a) Explain the concept of database schema and discuss the three types of schema in a database.
- (b) Discuss the differences between the candidate keys and the primary key of a relation. Explain what is meant by a foreign key. How do foreign keys of relations relate to candidate keys? Give examples to illustrate your answer.