HW1.8
(to be done in pairs)

Normalization of database tables

Case: Greendale Community College
(see spreadsheet data attached on Blackboard)

- A spreadsheet has been created that stores results of students at Greendale Community College. This includes annual promotion code REN (excluded), CON (can continue) or QUA (qualifies), along with information about the courses; their pre-requisites and lecture periods. You are required to design a relational database that can represent the information contained in the spreadsheet as closely and completely as possible.
    - Draw an ER (entity-relationship) diagram for the information in the spreadsheet, using the notation employed in this course. If necessary, state any assumptions you had to make when modelling this college data, and explain any modelling decisions taken.
    - Represent your ERD as a logical design showing relation schemas of this data. Choose 3 or 4 rows from the spreadsheet and show how that data would be stored in your database. Briefly describe any design decisions taken and any limitations of your schema.
    - Give any one functional dependency that holds for this information, and state in simple words what your functional dependency tells us about the data.
    - Is your relation scheme in 1st normal form or not? Give a reason for your answer.
    - Is your relation scheme in 3rd normal form or not? Give a reason for your answer.