Homework 3 Feedback

For handwritten assignments, please write legibly. Also, if you are going to include hand drawing, either include the original figure or make sure that the image is clear (you can use apps as Genius Scan instead of using your camera app). Some images were not clear, and at the end that could affect your grade.

As usual, provide enough detail to support your answers. Make sure to answer all the questions. We encourage you to itemize your answers.

Most common errors were:

Q1.

- Both Q1 and Q1A were equivalent. However, we expected the initial tree and the optimization tree for both queries. Arguing that the trees were similar or equivalent is not acceptable to get the full points for the question.
- For the optimization, is preferable to apply PROJECT (\(\pi\)) and SELECT (\(\sigma\)) operations before a JOIN.

Q2.

- An example was expected (for each case of the anomalies). If the example was not clear enough you could have some points deducted (e.g. not using an unnormalized table, use relationship tables, etc).
- You must argue why those anomalies are bad. Simply stating that the anomalies are bad and should be avoided is not an acceptable answer. It was preferred if you responded to this question separately.

Q3.

- Not including (possible) sources of information for FDs. Simply arguing that FDs can be inferred by determining the key was too vague. Also, expanding the explanation of FDs does not address the sources. Possible sources include the semantic of relations, data of relations or information get from the users.