PORTFOLIO

Report and Discussion of the Completed Labs

1.week1: Complete BASICTASK,MEDIUMTASK, and ADVANCEDTASK in DB_Lab_01 through network retrieval and number of attempts :1.

2.week2-week4: Completed DB_Lab_02 through practical class explanation and review of courseware 02_Data_Modelling, with 1 completion times and 3 attempts (attempts appeared in 4.b and 8,9).

week2: In this week, I completed parts 1, 2, and 4 of BASICTASKS, which took 1 hour in total. The number of attempts of each task was 3, and the number of completions was 1. The number of attempts of 2 questions is 1, and the number of completions is 1; The number of attempts of the 4 questions is 3 (mainly concentrated in b), and the number of completions is 1.

week3: During the week, 5 of BASICTASKS and 6,7 of MEDIUMTASKS were completed The total time is one and a half hours, 5 attempts are 3, and the number of completions is 1; The number of attempts of 6 questions is 4, and the number of completions is 2; The number of attempts for the 7 questions is 7 and the number of completions is 3.

week4: In this week, I completed questions 8 and 9 and revised other answers, which took a total of 2 hours. The number of attempts for questions 8 and 9 was 9, and the number of completions was 4.

Note: If the number of completions is not 1, it means that the original result has been modified.

3.week4-week8: completed DB_Lab_03 through practice class explanation and review of 03_Normalisation in courseware, the number of completions :3, the number of attempts :15(the reason for trying is that I did not understand the use method and related concepts of 1,2,3DNF in Normalisation, and discussed the documents Repeated changes were made.)

In this assignment, the most troublesome thing is that the information in the topic list needs to be input in the excel file on the computer, which I think is a waste of energy.

week4: Since I didn't learn the whole chapter deeply at that time, the completion of the entire DB_Lab_03 was rather tortuous. During the week, I completed 1,2,3, and 4 normalization problems in BASICTASKS (that is, no normalization problems of type 123NF). The whole process took an hour and a half, with 4 attempts and 1 completion.

week5: This week I have gotten a good grasp of the normalization process, so I start trying to work on the normalization of 123NF. This week, the completed part is all of title 5 (the first attempt to complete 123NF), 6,7 (excluding 123NF). The whole process takes about 2 hours. The number of attempts is 12 (7 for 5, 2 for 6, 3 for 7), and the number of completions is 3

week8: As we continue to work on the normalization process this week, as I have had a normalization understanding, it takes 2.5 hours and takes 14 attempts, with 2 compleations

4.**week5-week6:** Completed DB_Lab_04 through practical class explanation and review of courseware 04_SQL_Introduction and 05_SQL_Rules_Command with 2 completion times and 4 attempts (basic content, few repeated attempts)

Week5-week6: The whole section of the assignment is about learning SQL language. The following examples are all completed by Postgresql software in SQL language. In the whole process, there are many attempts for 3 and 4 questions at the beginning (the specific number of attempts is 7 times for 3 questions and 10 times for 4 questions). All other questions are between 1 and 5 times (5 questions average 4 times, 6 questions average 3 times).

5.**week5-week8:** Through practical class explanation and courseware 06_SQL_Queries,07_SQL_Functions and The review of 08_SQL_Joins is completed as DB_Lab_05, with 3 times of completion and 10 times of attempts.(The content is more than basic knowledge, in which join statement is often used in simple problems without join syntax, resulting in increased repetition times and time cost.)
Week6: In the last class of database, I finished BASIC TASKS. The whole process lasted for 2 hours. I tried to use join statement for each topic, but later I found it was not easy. The number of attempts has been lost, because each problem is to be solved through join statements, which makes the difficulty soaring, and at the same time, there are many error messages. But the whole process took about 30-35 attempts, and it was successful.

Week7: After giving up the idea of using join statement, the homework became easier. It took me one and a half hours to complete the MEDIUM TASK in week6, and the total number of attempts was 13 (2 for 8 questions, 2 for 9 questions, 5 for 10 questions, 1 for 11 questions, and 2 for 12 questions). After that, I spent 3 hours to complete the ADVANCED TASK with a total of 30 attempts (5 times for 13 questions, 3 times for 14 questions, 3 times for 15 questions, 4 times for 16 questions, 8 times for 17 questions, 3 times for 18 questions, and 4 times for 19 questions).

Personal Reflection and Critical Evaluation

1. For me, the content of DB_Lab_01 belongs to the basic knowledge, and there is no special difficulty or trouble for me.

2.DB_Lab_02 For me, I spend more time on operation and thinking than on understanding of concepts. The ER diagram allows me to deepen the concepts of entity and relationship through time and time modification, but the structure of the ER diagram is not clear and concise.

3.DB_Lab_03 is a difficult chapter for me. When I completed the tasks in this chapter, I could not extract and apply knowledge points (1DNF,2DNF,3DNF, etc.) correctly and quickly, and the classification of tables was slow and the accuracy was low.

4. For me, DB_Lab_04 is relatively basic and simple, and the completion process is relatively smooth. This chapter is the basic application of SQL language.

5. For me, the difficulty of DB_Lab_05 increased. During the completion process, advanced syntax was frequently used to solve some relatively simple problems, which reduced the completion efficiency.

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