SouthWest University

Lab report

Couse name Fundamentals of Database Systems

Semester 2023 - 2024 - 2

Grade 2022 Class CS4

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| Lab 5 | |  | | | |
| Experimental types | | ☑validation experiment  □comprehensive experiment  □design experiment | | | |
| * Goal: | | | | | |
| * Experimental contents and process. You should list the source code and screen shots showing the output results of your code.       During the experiment, I mistook fetchone as fetchall:    There are some differences between them. Fetch one only return one result while fetchall returns all of them in a row. And the datatype is set so you’ll have to use x[0] to extract the exact attribute you need.  AND, there are differences between ‘,’ and ‘+’ when using print() in python!!! ‘,’ makes larger blank between outputs so that you can’t match the answer, while ‘,’ won’t .  This is how it looks like if you use ‘,’:    You just literally can’t match the answer however you adjust the distance between outputs! That made me crazy and this cost me the most time of all tasks. | | | | | |
| * Experimental summary and analysis.   After the experiment, I learnt a lot about how to develop applications with python and databases. Especially python.  Besides, I gained more knowhow on some advanced operations with OpenGauss like transaction. These are important operations but usually not taught in the lecture and can only be learnt through practices. | | | | | |
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|  | Criteria | | | | scale |
| Goal | | | | A B C D E |
| Process | | | |
| Design | | | |
| Algorithm | | | |
| Code | | | |
| Data/Results | | | |
| Summary | | | |
| Written | | | |
| Score | |  | Tutor Signature：Quan Zou | |
| * Lab Evaluation Criteria   A: This lab is exceptional, working and meeting all of the specifications.The code is exceptionally well organized and very easy to follow.The code could be reused as a whole or each routine could be reused.The documentation is well written and clearly explains what the code is accomplishing and how.The program was delivered on time.The code is extremely efficient without sacrificing readability and understanding.  B: This lab is very good--works and produces the correct results and displays them correctly. It also meets most of the other specifications. The code is fairly easy to read. Most of the code could be reused in other programs. The documentation consists of embedded comment and some simple header documentation that is somewhat useful in understanding the code. The program was delivered within a week of the due date. The code is fairly efficient without sacrificing readability and understanding.  C: This lab is adequate, with only minor deficiencies. The program produces correct results but does not display them correctly. The code is readable only by someone who knows what it is supposed to be doing. Some parts of the code could be reused in other programs. The documentation is simply comments embedded in the code with some simple header comments separating routines. The code was within 2 weeks of the due date. The code is brute force and unnecessarily long..  D: This lab shows some effort but has at least one major deficiency.The program is producing incorrect results. The code is poorly organized and very difficult to read. The code is not organized for reusability. The documentation is simply comments embedded in the code and does not help the reader understand the code. The code was more than 2 weeks overdue. The code is huge and appears to be patched together.  E: This lab is poorly written and shows very little effort or understanding. | | | | | |