

CST363 Assignment 12 Database Administration: Backup, Recovery and logging

Name: _____ Christopher Holmes _____

Objective:

- to learn backup and recovery procedure using MySQL server.
- to perform a full forward recovery of a database as well as a point a time recovery.
- to understand how the information in the backup and log files are used during recovery.

Reading

- Chapter 19 in murach
- Also see the Powerpoint slides posted to iLearn “11 Recovery.pptx”
- I do not have any video on Backup/Recovery.

Do exercises #1-9 in murach page 557. Perform the exercises so you get some experience using MySQL utilities to backup and recovery a database.

Answer the following questions and submit as PDF file to iLearn Assignment 10

1. Define the terms *rollback* and *roll forward*.

A rollback is where you go back to the beginning of the transaction. A roll forward is where you apply different transactions that were recorded in the database.

2. Why is it important for the DBMS to write a log record before changing the database value?

It is important for the DBMS to write a log record before changing the database values so that it can keep track of the changes that are made in the database. This will allow for the administrator to see what changes are made, and will allow for a point in time restore if something were to go wrong and this was needed.

3. Describe the rollback process. Under what conditions should rollback be used?

A rollback will take all the changes to the current transaction. You would be able to use a rollback when commit is not enforced.

4. Describe the roll forward process. Under what conditions should roll forward be used?

The roll forward process will go through all of the processes and it restores the information that was changed in the current transaction. You would be able to use a roll forward when you need to restore the data that is at the end of a transaction.

