

Assignment 4 – Recoverability

Submission

Your submission should include three items:

- 1 .sql files as outlined later in this assignment.
- 4 .txt/.docx/.pdf files as outlined later in this assignment
- DO NOT submit a .zip file. Separate files is what is required.
- MAKE SURE in all files it is clear which question – and which part of which question – is being answered.

Reminders

This will form the basis of future assignments. We will continue to grow and enhance this database. Make sure you do a complete job of these tasks to help ensure a smooth process for future assignments.

Tasks

1 – (25%) – The basics of your database system.

- Check out the current settings for your database system – and – in particular the music database.
- Make sure log files are being kept
- Understand where your log files are being kept

What to hand in.

- Filename: A4Q1.docs (or PDF or TXT)
- Provide screen shots of the various configuration parameters for your music database showing how logging is set up for your database.

2 – (25%) – Take a BACKUP of your music database

- Take a full backup of your music database
- Make sure your backup is compressed using database system compression capabilities

What to hand in.

- Filename: A4Q2.docx (or PDF or TXT)
- Provide screen shots showing a successful completion of your backup process including the backup command itself
- Make sure it is clear that your backup is being compressed
- Provide screen shots of the location of your backup image
- Does your backup image include the required log files ? Y/N
- Is your backup image compressed ? Y/N

3 – (25%) – Perform a RESTORE on your music database

- Execute a series of INSERT/UPDATE/DELETES on your database – 5 commands minimum.
- Execute a RESTORE – WITHOUT a ROLLFORWARD on your database

What to hand in.

- Filename: A4Q3.SQL – and - A4Q3.docx (or PDF or TXT)
- Provide a copy of the SQL commands you ran (I/U/D)
- Show the original state of your table
- Show the successful completion of your SQL commands

- Show the updated table with the completed execution of the I/U/D commands
- Show the execution of a RESTORE
- Run a SELECT against the table and show that the I/U/D are no longer in effect (ie: show the original state of your table)

4 – (25%) – Run a ROLL FORWARD on your music database

- Run a “Point in Time” or “End of Logs” type of ROLL FORWARD which will replay all of the I/U/D commands from step 3.

What to hand in:

- A4Q4.docx (or PDF or TXT)
- Show the successful execution of the ROLL FORWARD
- Run a SELECT against the table and show that the I/U/D have now been executed

What to hand in:

Testing –

The specific instructions for each question are provided in the above steps. Follow those instructions. The bottom line is that you must demonstrate the following:

- You understand the important configuration options for your database system
- You successfully were able to take a backup of your music database

- You successfully ran additional changes to the music database AFTER the backup
- You successfully were able to restore your music database from the backup
- You successfully were able to replay the log records from your changes to the music database and get back all your changes

Filenames –

For each question above it is clearly outlined what you need to hand in.
I should receive:

- An **A4Q3.sql** file which shows all the commands you are running
- An **A4Qn.txt** output file which shows the results of all your activities in each step above (4 of them)

In the end, you will submit 5 files.