**Name: Md Tanvir Abir ID:**

Create a folder name it by your ID. Create 2 scripts one for DDL statements and another for DML statements and name both by your ID+ statement type (such as 12345\_DDL, And 12345\_DML)

Read the following report:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Book ID | Book Name | Writer Name | Issue No | Genre | Issue Date | Return Date | Issued To |  |
| 121 | Animal Firm | George Orwell | OR001 | Fiction | 1/1/2021 | 2/4/2021 | Alex Wilson |  |
| 233 | Jupiter Travels | Ted Simon | OR001 | Travel | 1/20/2021 | 2/2/2021 | Alex Wilson |  |
| 432 | Hamlet | William Shakespeare | OR004 | Drama | 1/10/2021 | 2/2/2021 | Alex Wilson |  |
| 123 | Pride & Prejudice | Jane Austen | OR009 | Fiction | 1/15/2021 | 1/31/2021 | Emily Brown |  |
| 424 | Arabian Sands | Wilfred Thesiger | OR009 | Travel | 1/10/2021 | 1/27/2021 | Emily Brown |  |
| 400 | Waiting for Godot | Samuel Beckett | OR009 | Drama | 1/1/2021 | 2/2/2015 | Emily Brown |  |

1. Create a 3NF database and tables by writing sql script as follows:

*Database Name*: **LibraryDB**, *Data File Name*: **LibraryDB \_Data\_1,** *Log File Name*: **LibraryDB \_Log\_1**, *Location*: **default database file location,** *Size* **(data file: 25mb, log file: 2mb)**, *Maximum size* **(data file: 100mb, log file: 50mb),** *File growth* **(data file: 5%, log file: 1mb)**

**2.** Insert all records into tables writing script.

3. Write a delete query for any one table of your project.

4. Write an update query for any one table of your project..

5. Write a script to delete a table.

6. Write a script to delete a column.

7. Write a join query to retrieve Book information using Group By and Having Clause

8. Write a sub-query to show all the information of **Issued To Alex Wilson**

9. Create a view to show all the information in a meaning full order

10. Create stored procedures to insert, update, delete data for any one of the table of your database and show use of output parameter.

11. Create a Clustered Index And Non-Clustered Index in any one of the table

12. Create a Scalar Function and Table valued Function

14. Create trigger on Insert, update, delete of any one table of you database.

15. Use statement of transaction in your script.

16. Show process of handling error

17. Create a CTE.

18. Create a simple Case and a Search Case

19. Create a Cursor to insert data into any one table of you database.

20. Show use of Convert, CAST, IIF, Choose, ISNULL, COALESCE, and RANKING Functions.

21. Create two tables and Merge data from these table into another table.