**Name: Imran Ahmed ID: 1272315**

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 1272315\_DDL, And 1272315\_DML)

Read the following report:

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Project Code** | **Project Title** | **Employee Code** | **Employee Name** | **Project Manager** | **Project Budget** | **Dept. Code** | **Department** | **Hourly Rate** |
| PC010 | Pensions System | S10001 | Allen Smith | Morgan Philips | 1000000 | L004 | IT | 220.00 |
| PC010 | Pensions System | S10030 | Lewis Jones | Morgan Philips | 1000000 | L023 | HR | 180.50 |
| PC010 | Pensions System | S21010 | Prince Lewis | Morgan Philips | 1000000 | L004 | IT | 210.00 |
| PC045 | Salaries System | S10010 | Barbara Jones | Hubert Martin | 1500000 | L004 | IT | 210.00 |
| PC045 | Salaries System | S10001 | Allen Smith | Hubert Martin | 1500000 | L004 | IT | 180.00 |
| PC045 | Salaries System | S31002 | Tony Gilbert | Hubert Martin | 1500000 | L023 | HR | 25.00 |
| PC045 | Salaries System | S13210 | Frank Richards | Hubert Martin | 1500000 | L008 | Pay Roll | 170.00 |
| PC064 | HR System | S31002 | Tony Gilbert | Kennedy Lewis | 1200000 | L023 | HR | 230.00 |
| PC064 | HR System | S21010 | Prince Lewis | Kennedy Lewis | 1200000 | L004 | IT | 170.00 |
| PC064 | HR System | S10034 | Robert James | Kennedy Lewis | 1200000 | L009 | Sales | 160.00 |

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

*Database Name*: **ProjectDB**, *Data File Name*: **ProjectDB \_Data\_1,** *Log File Name*: **ProjectDB \_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 Project Tile, Employee name, Manager Name ,Hourly Rate information by Project budget and Tile wise with minimum 4 employees in a Project.

8. Write a sub-query to show all the information of **Project HR System.**

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.

22. Quires Using Different Functions (Distnict, Top, Order By,Where,And,Between,self join, outer join, cross join, Except, Intersect, Union, Date functions, etc)