S No. Mini-project description

1 Student Management:

This is a small case study to manage student enrollment and allocation of department for a recently opened university.

Student Table			
Coloumn Name	Туре	Constraint	
Student_Id	Number	Primary Key	
Student_Name	Varchar	Not null	
Age	number	default 17	
Address	Varchar	null	
Parent_Contact	Number	null ; should be of 10 digits	
P_G_Name	Varchar	Not null	
email	Varchar	null	
Department	number	FK related to Department Table	
Year of Joining	number	4 digit year; default current year	

Department Table				
Coloumn Name	Туре	Constraint		
Department_Id	number	Primary Key		
Department_Name	varchar			
Total_Students	Number	Max 30 students		

- 1. Create the above mentioned tables as per the given specification and constraints
- 2. Populate Department table with sample data of 5 rows. Fix minimum of 5 departments and add them.
 - a. Keep 0 for Total_Students.
- 3. Populate Student table with sample data of 15 rows.
 - a. Initial few rows should be fully filled with all fields values
 - b. Insert few rows with null data. 2 rows with address as null and 2 contact no as null, one row with both as null.
 - c. Make few rows to be inserted with default value for age and year of joining.
- 4. Update Department table's Total_Student column with total number of records found in student table for that department. [Use getStudentsCount(deptId) function described below]
- 5. Create procedure to insert data into StudentTable.
 - a. Provide 9 IN parameters for table columns and 1 OUT parameter to give the status.
 - b. Before Insert please check whether whether Total_students is < 30.

- i. if total is < 30 then
 - 1. Insert record into student table
 - 2. Update Total_Students + 1.
 - 3. Assign "inserted" to status variable
- ii. Else
 - 1. Assign "Department Full" to status
- 6. Create a function called getContact which take one *IN parameter* of Student_Id and returns the contact number of that Student.
- 7. Create a function call getStudentsCount which takes one in parameter of department_Id and returns the total students available in that department.
- 8. Create a table called Student_BackUp with all the records from the Student table.
- 9. Create a table called Test_Report with columns Department_Id, Department_Name, Tot_No_Students, Avg_Age_Students.
- 10. Create a script called Table_recover.sql in which you write a query that takes a table name as from user during time and recovers that table if it is dropped accidently.
- 11. If all documentation is over, delete the Test_Report table, take care no one can retrieve it back