DBMSL-GROUP A Assignments A1-A4

Assignment No 1

ER Modeling and Normalization:

Decide a case study related to real time application in group of 2-3 students and formulate a problem statement for application to be developed. Propose a Conceptual Design using Er features using tools like ERD plus, ER Win etc. (Identifying entities, relationships between entities, attributes, keys, cardinalities, generalization, specialization etc.) Convert the ER diagram in to relational tables and normalize Relational data model.

Note: Student groups are required to continue same problem statement throughout all the assignments in order to design and develop an application as a part Mini Project.Further assignments will be useful for students to develop a backend for system.To design frontend interface students should use the different concepts learnt in the other subjects also.

Assignment No 2A

Create following tables in MYSQL

Employee(Emp_id, Dept_id, fname, Iname, designation, salary, JoinDate)

Dept (Dept id, dname, dlocation)

Project(Proj id, Dept id, Pname, Plocation, Pcost, Pyear)

Create view, index, sequence and synonym based on above tables.

Note: Use referential integrity constraints while creating tables with on delete cascade options.

Assignment No 2B

Use the tables created in assignment no 2 and execute the following queries:

- Insert at least 10 records in the Employee table and insert other tables accordingly.
- 2. Display all Employee details with Department 'Computer' and 'IT' and Employee

first name starting with 'p' or 'h'.

- 3. Lists the number of different Employee Positions.
- 4. Give 10% increase in Salary of the Employee whose joindate before 2015.
- 5. Delete all the department details having location as 'mumbai'.
- 6. Find the names of Projects with location 'pune'.
- 7. Find the project having cost in between 100000 to 500000.
- 8. Find the project having maximum price and find average Project cost.
- 9. Display all employees with Emp _id and Emp name in descending order.
- 10. Display Proj_name, Plocation , Pcost of all project started in 2004, 2005, 2007

OR

Assignment No 2A

Consider the following relational Schema.

- Student(s id,Drive id,sname,CGPA,sbranch)
- PlacementDrive(Drive_id,company_name,package,location)
- Training (T_id,Tcompanyname,Tfee,Tyear)

Note: Use referential integrity constraints while creating tables with on delete cascade options.

Create view, index, sequence and synonym based on above tables.

Assignment No 2B

Use the tables created in assignment no 2 and execute the following queries:

- 1. Insert at least 10 records in the Student table and insert other tables accordingly.
- 2. Display all students details with branch 'Computer 'and 'IT' and student name starting with 'a' or 'd'.
- 3. List the number of different companies.
- 4. Give 15% increase in fee of the Training with date of training year as 2019.
- 5. Delete placementdrive details having package less than 500000.
- 6. Find the names of companies belonging to' Pune' or 'Mumbai'.
- 7. Find the student name that joined training on year 2019 as well as in 2021
- 8. Find the student name having maximum CGPA score and names of students having CGPA score between 7 and 9.

9. Display all Student name with T_id with decreasing order of Fees 10. Display Company name, S_name , location and Package with Package 30K, 40K and 50k

A2: Guidelines

Synonyms not supported in MySql. Required to include example from oracle in write-up.
Sequence should be implemented with AUTO_INCREMENT. Concept of sequence from oracle must be included in the write-up.

Lab Manual Preparation and Revision for NBA and NAAC

A1- PPJ

A2- AGP

A3,A4 –Nikita

A5- DDK

A6-VVB

A7-MSC

A8-YAH

B1-PMM

B2,B3-VSG

B4- Rutuja