

IT3223 Advanced Database Management Systems – Practical Exercise - 01

Consider a database, which contains the two relations Department and Employee given below.

Department and **Employee** are uniquely identified by **Department number (DepId)** and **Employee number (EmpId)** respectively.

Tabel 01: Department

DepId	DName	Location
1732	Production	Jaffna
1654	Supply	Vavuniya
1543	Planning	Colombo
2312	Mechanical	Kilinochchi
2323	Finance	Mankulam

Tabel 02: Employee

EmpId	EmpName	Job	DepId	DOB
111	Finch	Clerk	1543	1993-02-04
112	Warner	Engineer	2312	1994-03-17
113	Smith	Manager	1732	1989-05-13
114	Maxwel	Accountant	2323	1990-08-27
115	Stare	Clerk	1732	1979-08-31
116	Cummins	Technician	2312	1998-09-11
117	Zampa	Technician	1654	1997-12-09
118	Carrery	Manager	1654	1996-04-29

a) Create a database with name “**Company**” using MySQL having the above relations’ instances with proper indication of Primary and Foreign keys.

b) Display the data definition for each of the relations.

c) List all the records for each of the relations.

d) Write down SQL statements for each of the following queries:

I. Display the names of all employees whose names start with the letter 'S'.

II. Count the total number of employees who work as 'Manager'.

III. Add a new column named Salary (of type INT (5)) to the Employee table, placing it between the Job and DepId column.

Insert the appropriate salary values for each employee in the `Salary` column based on the provided data below.

EmpId	Salary
111	25000
112	75000
113	60000
114	65000
115	28000

116	35000
117	32000
118	55000

- IV. Display the EmpId and Job of all employees whose salary is greater than 30,000.
- V. Get all the department names located in 'Jaffna'.
- VI. Update the accountant to Engineer in the Job column for the Employee whose employee number is '114' in the Employee table.
- VII. Display all records from the Employee table where the Department number ends with the digit 2 and has exactly 4 characters in the Employee table.
- VIII. Find the departments where the maximum salary of employees is greater than 50,000.
- IX. find the average salary of each department and display the result in descending order of average salary."
- X. display the EmpId, EmpName, DepId, Dname of all employees who works as a "Technician".