Lab Guide for RDBMS Essentials

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Contents

1 Background

This document contains assignments to be completed as part of the hands on for the subject RDBMS Essentials **(Course code: DB91).**

Note: In order to complete the course, assignments in this document must be completed in the sequence mentioned.

1 Assignments for Day 6 of RDBMS Essentials

1.1 Assignment 1: Query tuning

Objective: To be able to identify the defect in a query with respect to its performance and be able to write an optimized query.

Problem Description:

Identify the defects in the following queries with respect to its performance. Replace the following queries with an optimized one.

1. SELECT * FROM branch; [branch name alone is required].
2. SELECT coursename,semester FROM course WHERE branchid IN('B1','B2');
3. SELECT applicantname, emailed FROM applicant WHERE overallpercentatge BETWEEN 65 and 100;
4. SELECT coursename FROM course WHERE coursename LIKE '%Data%'; [here we know that the coursename starts with Data]
5. SELECT * FROM student WHERE studentid||userid= '2002sam'; [intend to select only applicantid and branchid]
6. SELECT optedbranch,COUNT(applicantid) FROM applicant GROUP BY optedbranch HAVING optedbranch='B1' OR optedbranch='B2';
7. SELECT coursename,semester FROM course WHERE elective= 'E' AND semester=1
   UNION
   SELECT coursename,semester FROM course WHERE elective= 'R' AND semester=1 ;
8. SELECT DISTINCT applicantid, applicantname FROM applicant;
9. Our search of Semester marks and grade often through the studentid and courseid rather than registrationid, which is a Primary Key. What is the solution to get a faster result?

1.2 Case study based assignments:

Objective: To be able to formulate a proper PL/SQL code when problem statement is provided.

Details: 3 assignments have to be solved as a part of given case study. Check your batch portal for the details related to case study as well as assignments related to them.