

Task 1:

Use any views in the catalog, whose names begin with "ALL_", to retrieve as much information about user

"CHRISTIAN" as you can find ... including privileges, roles, objects he owns or has access to, etc.

Collect all your statements into one file with extension ".sql" and execute that (with "@" or "exec") to collect

your results. Add your own interpretation of the results in essay form at the end of the result file.

Task 2:

User "SCOTT" owns four tables. Use the views in the catalog to determine in detail, what relational constraints link

those tables together. (Analyze the contents of "ALL_CONSTRAINTS" and related views.)

Task 3:

A company has an e-commerce business, which is run via the internet and attracts sales from all over the world.

☐ All data are stored on three different servers, which together hold the complete database for the company

(networked distributed over the three servers).

☐ Each server runs Oracle DBMS software and assorted other applications

☐ Most of the data are important, i.e. loss or damage would endanger the company

☐ Loss of sales due to server down-time must be avoided

Your task is to create two documents:

a) A list of potential risks for data loss, each one rated with a percentage how likely it can happen

Sort this list in descending order by the rating

b) A strategy how to prepare for potential loss or damage such that the company can recover

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Your submission shall focus on best practice, how to protect the DBMS and its data, but shall not exclude the

operating system and other files on the servers

For this exercise, you do NOT need to consider the risks to hardware or network connection, and you may

assume to have a reasonable budget to acquire additional hardware that you think is needed.

The evaluation of your proposal depends on how well you assess the risks and how well your plan prepares for

recovery (or prevention of the risks), and how economical you plan with respect to your budget.

Task 4:

You are given the DBMS privilege to select from two tables with large numbers of data:

☐ SMIS.APERS (147,935 rows)

☐ SMIS.ASUBJECT (331,277 rows)

The following queries execute very differently, one reasonably fast, the other one very slow.

☐ select count(*) from apers P, asubject s

where p.apnum = s.apnum

and p.cschool = s.cschool;

☐ select count(*) from apers P, asubject S

where P.apnum = S.apnum;

Analyze and identify where the problems are occurring and what causes the slow execution.

Make recommendations, how to improve execution time (with reasons for your assessment).

Your analysis should be based on information you get from the catalog and the data (describe which facts you use and

where you got them from).