

## Problem 4. DB Testing - 3 labs assigned

After you finished the design of your database, the development team is interested in obtaining some results regarding the performance of your design. In order to record the different test configurations and their results you create the following relational structure:

**Tests** – holds information regarding the different test configurations

**Tables** – holds information regarding the tables that might take part in a test

**TestTables** – a link table between *Tests* and *Tables*. It holds information regarding the participation of each table to each test

**Views** – a set of views that are present in the database and are used to assess the performance of certain select queries

**TestViews** – a link table between *Tests* and *Views*. It holds information regarding the participation of each view to each test

**TestRuns** – a table containing information about different test runs. A test run involves the following:

- 1) *deleting* the information from the tables;
- 2) *inserting* rows in the tables;
- 3) *evaluating* the views

**TestRunTables** – contains the performance information for every table in which values were inserted

**TestRunViews** – contains the performance information for every view in the test

Your task is to implement a set of stored procedures for evaluating and storing the results of the tests. The test must be available for at least three tables:

- a table with one column as the primary key and no foreign key,
- a table with one column as the primary key and at least one foreign key,

- a table with two columns as the primary key,

an three views:

- a view with a select statement working on a single table,
- a view with a select statement working on at least two tables,
- a view with a select statement working on at least two tables and having a group by clause.

Observations:

*The way you implement the stored procedures and/or functions is up to you. Results which allow the system to be extended to new tables with the minimum amount of code will be more appreciated.*

The script for creating the above relational structure could be downloaded from:  
[Lab4Structure.sql](#)