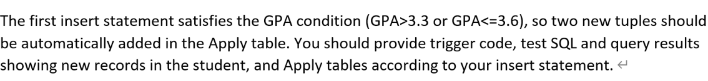
**FAQS for Assessment 1:**

**FAQ1:**

**About the Q1(b), I wonder whether the relationship is or not and. If the relationship is or, the trigger will make no sense that every GPA satisfy the statement.**

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In the question, the conditions on GPA are written by considering the test SQL. In the Test SQL statement you can only provide one value for each student for GPA either >3.3 or <=3.6.

However, when you capture this condition in the trigger logic you definitely need to use **AND** logical expression.

**FAQ2:**

**I want to ask about the inserting statements for checking trigger in Assessment 1 Q1(b). Can I just use the example you gave to us? Or do I need to write the SQL statement by myself?**

About Q1(b), you can either use the same test SQL or you can provide your own, any way is fine.

**FAQ3:**

**For Q4, do I need to add comments to explain the codes?**

About Q4, you can add comments if you are making some assumptions, or you want to explain your logic. However, comments are not mandatory.

**FAQ4:**

**I have some confusion about the question1(c) of assignment 1. The title requires two pairs of indexes, but can we build an index for different tables? Can indexes be built across two tables? Please help me.**

Two pairs do not mean that you create index pair under one create index statement.

Two pairs mean what two indexes will be suitable in the given scenario.

For example:

create index (SID)

Create index(CName)

the question is asking which two attributes will be more suitable to be indexed.

You need to evaluate each given pair and discuss whether the index on the given attributes will reduce number of blocks to be access or even if we have indexed it won't be useful.

e.g SID only will be useful for join condition on equality operator,

whereas CName can also support inequality operator such as <, > , besides =.

look for GPA, in query and evaluate will GPA will be useful to retrieve rows with lesser number of data blocks accesses or not,  e.g. in this case GPA may not be useful since many students will have GPA >1.5, it means irrespective of the index on GPA almost all rows need to be scanned.

By evaluating each attribute in the pair identify which two attributes will be more suitable to optimize the exceution of the given query in the question.

**FAQ5:**

**I am confused about the concept about serializable and non-serializable schedule. Can you explain to me about them?**

Please refer to serializability notes shared at LMO under topic 2.

**FAQ6:**

**I have a question about whether a transaction running concurrently without serialization must have errors like dirty read, phantom read, etc. Is it possible that they don’t have any errors even though they don’t run in serial.**

Traditional DBMS won’t allow transactions to run concurrently without enforcing some isolation level (serializable, read committed, or repeatable read). So if we speak from a DBMS point of view the answer is no, we won't have dirty read or other problems when we are executing statements using some DBMS such as Oracle, MySql, SQLite, etc.

However, theoretically (if we ignore DBMS), when we think of transactions, we introduce these problems as a motivation to have some mechanism i.e. transaction manager in DBMSs to control such problems.

So when we don’t have any isolation level (theoretically), we may encounter dirty read, inconsistent data, etc. when we have interleaving operations from one transaction to other in the schedule.

**FAQ7:**

**Graphical user interface, application

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Is that mean there is no need to consider commit in Q2(a)?

in the question 2(a), commit is not mentioned intentionally.

It means any of transaction might get aborted before committing.

you need to identify all possible final stat of R if any of these transaction could not complete plus if both transaction could complete successfully.

**FAQ8: Q2 (a,b)** **I don't understand what's the meaning of " a relation R(A) containing {(5),(6)}" or "a table R(A) containing {(1),(2)}". Does it mean the A have 2 value 5 or 6/1 or 2?**

It means we have table R with column A having two rows. something like below:

A picture containing text, map

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**FAQ9: Q (3): Do you want us to create a view using SQL?  Or just like the Q3(1) write a XQuery expressions?**

**Many students are confused about the word view in Q3.**

Basically, the results/output of any form of a query is usually called view. So in these question just like Q3(i), use xquery expression to retrieve the required output. Copy the xquery expression and screenshot of results of running the Xquery in your report.