

Some FAQ's on the project:

Q: What is the best strategy to do fragments?

A: For doing fragments, you can observe it from the perspective of theory course. You can design good fragmentation schema from the examples and exercises from the textbook. For example, figure 3.4 (page 34), exercise 3.2, 4.3 etc.

Q: How can we allocate or store the fragments in different sites?

A: You have to create table separately at each site. In order to allocate data into the individual site, you can write codes in the server that will insert data into the tables of a site according to the fragmentation schema. Another simple way is to insert data manually. But the first method is very efficient.

Q: Which methods from theory should we implement?

A: The following features can be included in your project.

1. You should be able to simulate *level - 3 distribution transparency* (as discussed in the theory class). Therefore, you should apply the effect of update steps in your code. [Ch. 3]
2. You can simulate some *operator trees* for your project. [Ch. 5]
3. You can also implement an operator tree with its *canonical expression*. For example, if someone wants to SELECT from EMP table, your code will apply canonical expression and extract the result of (EMP1 UN EMP2) instead. It is similar to simulate *level - 1 distribution transparency*. [Ch. 3 + 5]
4. You can simulate the algebra of qualified relations and proof the rules by applying them to actual table and data. [Ch. 5]
5. You can also apply to *estimate profiles of results of algebraic operation* by implementing database profiles. [Ch. 6]
6. You can simulate *semi-join programs for join queries*. [Ch. 6]
7. You can even implement a machine learning technique (i.e. *KNN classifier*) for your project.

Note that, it is not mandatory to apply all of the above features in your project. The more feature you implement, the more positive reviews you gain. You can also implement something useful, which is not listed above.

Implement the features as functions or procedures, and if possible, as packages.

Q: Do we need to implement triggers?

A: Yes. At least two triggers.

Q: Do we need to write the final report?

A: Yes! The report will represent your whole work. Try to make it attractive. Include all the theoretical and practical details (figures, relational algebra, operator trees etc if necessary). While writing about functions and procedures, including their inputs, outputs, and functionalities or description of how it works. No need to provide the screenshots of the results.