Consider a simple SQL query:

```sql
SELECT * 
FROM employees 
WHERE salary > 100000.
```

Trace the “life” of a SQL query from the time the user issues the query to the DBMS, to accessing data from disk, to returning the results to the user. Be as detailed as possible describing interactions with the different sub-components of a DBMS (e.g., query optimizer, the bufferpool, the log file, the storage sub-system).

Suppose you have designed, implemented and deployed a database application, but the performance of the application is not satisfactory. Using everything you have learned in this course, discuss what can be done to tune the performance of the database application.