First name, last name, login

Example [1] (9 points)
Describe the deferred update technique of the DBMS recovery. What and where is stored? Which operation from UNDO and REDO is performed in this case?

Example [2] (9 points)
Describe a query evaluation plan for the query `SELECT * from Student where login='kra2286'` for the heap table and the index created for the `login` attribute.

Example [3] (10 points)
What is the composite index (or the index with the compound key)? Which queries are/are not possible to make more efficient using this index?

Example [4] (9 points)
Describe the SQL injection, write an example. How it is possible to prevent it?

Example [5] (9 points)
Describe the meaning of the DTO and DAO objects in ORM, write an example.

Example [6] (9 points)
Describe 4–5 features of the object-relational data model (compare it mainly with the relational data model).