

Összpontszám: 25 (5+10+10)

1. Application development with databases (5 points)

There are two basic ways to develop database-based applications:

„..... to“ (an example is coding in PL/SQL)

„..... to“ (an example is writing an external Java application)

Company strategies for application development with Oracle:

1. First try to solve your problem with
2. If this is not sufficient, then try PL/SQL
3. Only use other languages like Java externally of your database
if

– OR –

2. Keep processing out of the database
3. Only use PL/SQL instead of external application,
if

2. JDBC (10 points)

JDBC stands for:

What is a JDBC driver? Which driver type is the most common and how can you characterize it (the Oracle thin driver, used in the lab, is also of this type)?

What is a Statement, PreparedStatement és CallableStatement? What is the difference between a Statement and a PreparedStatement?

What advantages has a PreparedStatement?

What is SQL code injection?

3. ORM, Hibernate (10 points)

What is Object-Relational Mapping (ORM)? What are the main advantages of using an Object-Relational Mapper?

A class in the program code corresponds (in the simple case) a
an instance a in the database

Two methods of Hibernate to define the mapping:

(1)

(2)

Two possible loading strategies of Hibernate (for related objects):

(1)

(2)

Would you use an ORM (e.g., Hibernate) for a transactional system? For a data warehouse?
Support your statement with arguments!