#1 Midterm control questions
For the "Foundations of databases" course

1. Characteristics of a modern DBMS (database management system). Subject area. Related tables. Isolation of data and application.
2. Characteristics of a modern DBMS (database management system). Redundancy. Consistency. Query language. Transaction properties.
3. Characteristics of a modern DBMS (database management system). Multiuser and concurrent access. Multiple view. Security.
4. Basic features of the relational model. Relations. Normalization.
5. Basic features of the relational model. Attribute atomicity. Unique values. Attribute domains.
6. Entity-relationship model. Entities, attributes and their representation using ER and IDEF1X notations. Examples of entities and attributes.
7. Entity-relationship model. Attribute types and their representation using ER and IDEF1X notations. Examples of entities and attributes of different types.
8. Entity-relationship model. Key attributes and their types. Examples of entities and key attributes.
9. Entity-relationship model. Key attributes and their representation using ER and IDEF1X notations. Examples of entities and key attributes.
10. Entity-relationship model. Relations and relation sets. Examples of relations.
11. Entity-relationship model. Relations and relation degrees. Examples of relations.
12. Entity-relationship model. Relations and relation cardinalities. Examples of relations.
13. Entity-relationship model. First normal form. Example of the relation normalization to the 1NF.
14. Entity-relationship model. Second normal form. Example of the relation normalization to the 2NF.
15. Entity-relationship model. Third normal form. Example of the relation normalization to the 3NF.