CS304
Database System Concepts

03/20/2012

Quiz 3

- Which of the following statement is correct?

  a) Candidate keys are permitted to be null

  b) Primary keys are permitted to be null

  c) Integrity constraints mainly guard against system crash.

  d) you cannot create a type in SQL.

- If you want BOB to transfer his privileges, which option will you use when you create an account for him?

  a) with grant option

  b) reference

  c) all privileges

  d) public

- Which statement about JDBC is NOT correct?

  a) JDBC can retrieve metadata

  b) Prepared statement is better than string concatenating

  c) By default, each SQL statement is treated as a separate transaction.

  d) JDBC can only handle English character

- Which statement is a safe tuple calculus expression?

  a) $\{t \mid \neg t \in r\}$

  b) $\{t \mid t[A] = 5 \vee true\}$

  c) $\{t \mid t[name] \neq \text{Bob} \wedge t[\text{gender}] = male\}$

  d) $\{t \mid t \in \text{instructor} \wedge t\,[\text{salary}] > 80000\}$

- What is the value of $dom(t \in r \wedge t[a] = 1)$

  a) the set only contains 1

  b) the set of all values appearing in r

  c) the set contains all possible values of each attribute in r.

  d) the set containing 1 and all values appearing in r.

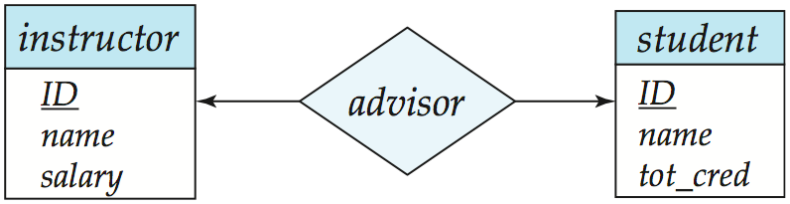
- Which type of relationship does the following ER diagram express?

  a) one-to-one

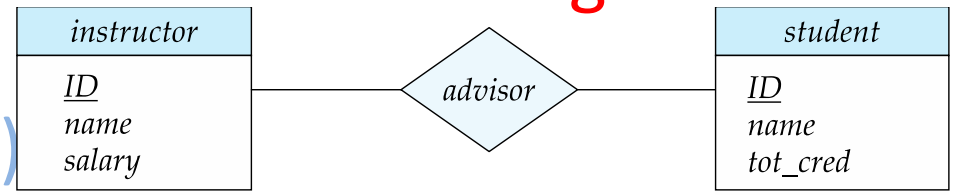
  b) one-to-many

  c) many-to-one

  d) many-to-many



- In ER diagram identifying relationship is depicted by?
  - a) Double diamond
  - b) Rectangle
  - c) Rhombus
  - d) Cycle
- Which is the best schema for the following ER diagram?



  - a) advisor=(s_id,i_id)
  - b) advisor=(s_name,i_id)
  - c) advisor=(s_id,i_name)
  - d) advisor=(s_name,i_name)

- Which information is NOT useful in create a schema to represent aggregation?
  - a) primary key of the aggregated relationship
  - b) the primary key of the associated entity set
  - c) any descriptive attributes
  - d) attributes of the aggregated relationship
- Which design is better for a multivalued attribute *M* of an entity *E*?
  - a) represent M in a single table
  - b) represent M with other attributes together
  - c) represent M with composite attributes
  - d) represent M in a relationship associated with E