Database Design Solved MCQs- Part 2

MCQs

Multiple Choice Questions

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The RDBMS terminology for a row is

- Tuple
- Relation
- Attribute
- Degree

A DBMS query language is designed to

- Support end users who use English-like commands
- Support in the development of complex applications software
- Specify the structure of a database
- All of the above

In SQL, testing whether a subquery is empty is done using

- Distinct
- Unique
- Null
- Exists

Relations produced from an E-R model will always be

- First normal form
- Second normal form
- Third normal form

- Fourth normal form

The database schema is written in

- HLL
- DML
- DDL
- DCL

An entity set that does not have sufficient attributes to form a primary key is a

- Strong entity set
- weak entity set
- Simple entity set
- Primary entity set

Which level of Abstraction describes what data are stored in the Database?

- Physical level
- View level
- Abstraction level
- Logical level

Which of the following is a low level operator?

- Insert

- Update
- Delete
- Directory

Which of the following statements is true, when structure of database file with 20 records is modified

- ? EOF ( ) Prints T
- ? BOF ( ) Prints F
- ? BOF ( ) Prints T
- ? EOF ( ) Prints F

If data are stored sequentially on a magnetic tape,they are ideal for

- On line application
- Batch processing application
- Spreadsheet application
- Decision making application

The result of the UNION operation between R1 and R2 is a relation that includes

- All the tuples of R1
- All the tuples of R2
- All the tuples of R1 and R2
- All the tuples of R1 and R2 which have common columns

The method in which records are physically stored in a specified

order according to a key field in each record is

- Hash
- Direct
- Sequential
- All of the above

The default level of consistency in SQL is

- Repeatable read
- Read committed
- Read uncommitted
- Serializable

Data Mining uses _____, _____ and _____ to build effective predictive model.
(i) Data set
(ii) Information set
(iii) Input set
(iv) Process set
(v) Output set
(vi) Test set

- (i), (ii) and (iv)
- (ii), (iv) and (v)
- (i), (v) and (vi)
- (ii), (iii) and (v)

Which of the following is not a consequence of concurrent operations?

- Lost update problem

- Update anomaly
- Unrepeatable read
- Dirty read

Data security threats include

- Privacy invasion
- Hardware failure
- Fraudulent manipulation of data
- Encryption and decryption

The relational model feature is that there

- Is no need for primary key data
- Is much more data independence than some other database models.
- Are explicit relationships among records.
- Are tables with many dimensions

A lack of normalization can lead to which one of the following problems?

- Insertion problems
- Deadlock
- Lost updates
- Deferred updates

Assume transaction A holds a shared lock R. If transaction B also

requests for a shared lock on R.

- It will result in a deadlock situation.
- It will immediately be rejected.
- It will immediately be granted.
- It will be granted as soon as it is released by A.

A B tree used as an index for a large database table has four levels including the root node.If a new is key inserted in this index ,then the maximum number of nodes that could be newly created in the process are

- 5
- 4
- 3
- 2

What deletes the entire file except the file structure ?

- ERASE
- DELETE
- ZAP
- PACK

The operation which is not considered a basic operation of relational algebra is

- Join
- Selection
- Union

- Cross product

A data model is a collection of conceptual tools for describing

- Data and data relationships
- Data semantics and consistency constraints
- Data,data relationship,data semantics and consistency constraints
- None of the above

Two phase protocol in a database management is

- A concurrency mechanism that is not deadlock free
- A recovery protocol used for restoring a database after a crash
- Any update to the system log done in two phases
- Not effective in database

Data item characteristics that are important in data management include

- Width
- Language
- Spelling
- All of these

Which diagram provides a formal graphic notation for modelling objects, classes and their relationships to one another ?

- Object diagram

- Class diagram
- Instance diagram
- Analysis diagram

Specialization is _____ process.

- top-down
- bottom up
- both (A) and (B)
- none of these

The distinguishable parts of a record are called

- Data
- Files
- Fields
- All of these

One solution to the multivalued dependency constraint problem is to

- Split the relation into two relations, each with a single theme
- Change the theme
- Create a new theme
- Add a composite key

A table joined with itself is called

- Join

- Self Join
- Outer Join
- Equi Join

The view of total database content is

- Conceptual view
- Internal view
- External view
- Physical View

The physical location of a record is determined by a mathematical formula that transforms a file key into record location in

- A tree file
- An indexed file
- A hashed file
- A sequential file

ODBC stands for

- Object Database Connectivity
- Oral Database Connectivity
- Oracle Database Connectivity
- Open Database Connectivity

Which of the following is the recovery management technique in

DDBMS ?

- 2PC (Two Phase Commit)
- Backup
- Immediate update
- All of the above

Which of the following is an optimistic concurrency control method ?

- Validation based
- Time stamp ordering
- Lock-based
- None of these

Which allocation scheme would work best for a file system implemented on a device that can only be accessed sequentially,a tape driver,for instance?

- Contiguous allocation
- Non contiguous allocation
- Indexed allocation
- None of the above

A form can be used to

- Modify records
- Delete records
- Format printed output
- All of these

A data mart contain

- Summarized data
- De normalised data
- Aggregate departmental data
- All of these

The concept of locking can be used to solve the problem of

- Deadlock
- Lost update
- Inconsistent
- All of the above

Data integrity control

- Is used to set upper and lower limits on numeric data
- Requires the use of passwords to prohibit unauthorized access to the file
- Has the data dictionary keep the date and time of last access last back-up, and most recent modification for all files
- All of the above

Every BCNF decomposition is

- Dependency preserving
- Not dependency preserving
- Need be dependency preserving
- None of these

Which of the following is the result of a SELECT statement?

- TRIGGER
- INDEX
- TABLE
- None of these

Which of the following is another name for weak entity?

- Child
- Owner
- Dominant
- All of the above

Data independency in DBMS is known as

- Data modeling
- Data hiding
- Data capturing
- Data consistency

Which command is the fastest among the following ?

- COPY TO <NEW FILE>
- COPY STRUCTURE TO <NEW FILE>
- COPY FILE <FILE 1> <FILE 2>
- COPY TO MFILE-DAT DELIMITED

What is a relationship called when it is maintained between two entities?

- Unary
- Binary
- Ternary
- Quaternary

Which normal form is considered adequate for relational database design?

- 2NF
- 3NF
- 4NF
- BCNF

Decomposition help in eliminating some of the problems of bad design

- Redundancy
- Inconsistencies
- Anomalies
- All of the above

Which possibility among the following is invalid in case of data flow diagram?

- A process having inbound data flows more than outbound data flows

- A data flow between two processes
- A data flow between the data stores
- A data store having more than one inbound data flows

Which of the following concurrency control schemes is not based on the serializability property?

- Two – phase locking
- Graph-based locking
- Time-stamp based locking
- None of these