C2_QUIZ

iit2020137@iiita.ac.in Switch account

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* Required

The space overhead in dynamic hashing is _____ than that of static hashing

- ○ More
- ◉ Less
- ○ Equal
- ○ None of the mentioned

Clear selection

If a relation of n attributes is having only one candidate key then the number of possible super keys

- ○ 2^n
- ◉ 2^(n-1)
- ○ 2^n -1
- ○ 2^n + 1

Clear selection

A _____ index is the one which satisfies all the columns requested in the query without performing further lookup into the clustered index?

- ○ Clustered
- ○ Non Clustered
- ◉ Covering
- ○ B-Tree

Clear selection

Find Highest Normal Form of Given Relation. R(ABCDE) {ABD->C,BC->D,CD->E}

- ○ 1NF
- ○ 2NF
- ◉ 3NF
- ○ BCNF

Clear selection

If every Candidate key of R is Simple Candidate Key then Realtion R?

- ◉ In 1NF but may not in 2NF
- ○ In 2NF but may not in 3NF
- ○ 3NF may not in BCNF
- ○ BCNF

Clear selection

R(ABC) F:{AB->C,C->A}. candidate key : AB and BC. The relation is in

- (●) 1NF
- ( ) 2NF
- ( ) 3NF
- ( ) BCNF

Clear selection

A table has fields Fl, F2, F3, F4, F5 with the following functional dependencies F1 → F3 F2→ F4 (F1 . F2) → F5 In terms of Normalization, this table is in *

- (●) 1NF
- ( ) 2NF
- ( ) 3NF
- ( ) NONE

The schema of a relation employee included an attribute children whose domain elements are sets of names. Then what is the type of attribute children in this relation?

- ( ) Single valued
- ( ) Composite
- (●) Multivalued
- ( ) Derived

Clear selection

For a Person entity, we have age and dateOfBirth attribute associated with it. The attribute age is

- ○ Composite
- ○ Multivalued
- ◉ Derived
- ○ Single-Valued

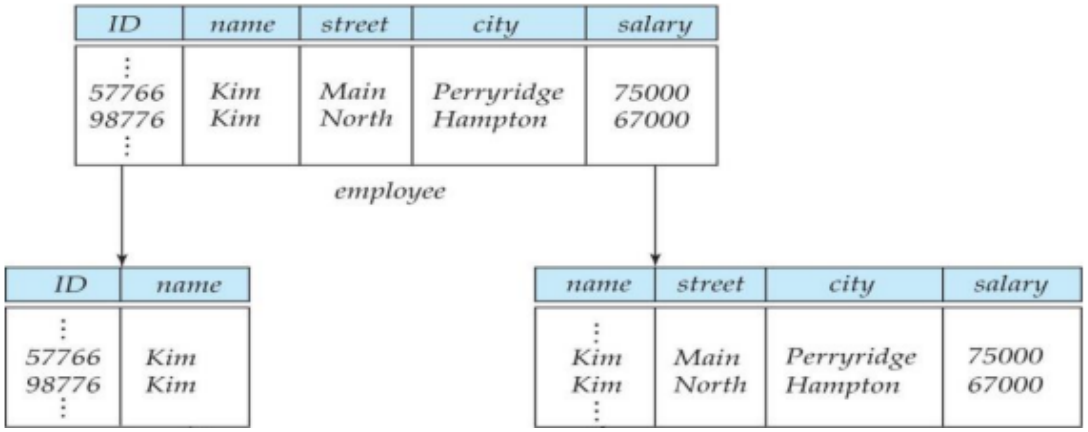
Clear selection

Double line in ER Diagram represents :

- ○ Weak entity set
- ○ Derived Attribute
- ○ Partial Participation of an entity set
- ◉ Total participation of an Entity set

Clear selection

What is the type of decomposition described in the given image



- ○ Dependency Preserving
- ○ Lossless
- ◉ Lossy
- ○ Not a proper decomposition

Clear selection

A _____ on the attribute A of relation r consists of one bitmap for each value that A can take.

- ◉ Bitmap index
- ○ Bitmap
- ○ Index
- ○ Array

Clear selection

In which of the following, a separate schema is created consisting of that attribute and the primary key of the entity set. *

- ○ A many-to-many relationship set
- ◉ A multivalued attribute of an entity set
- ○ A one-to-many relationship set
- ○ None of the above

To identify the deleted records we use the _____

- ◉ Existence bitmap
- ○ Current bitmap
- ○ Final bitmap
- ○ Deleted bitmap

Clear selection

In ordered indices the file containing the records is sequentially ordered, a _____ is an index whose search key also defines the sequential order of the file.

- ◉ Clustered index
- ○ Structured index
- ○ Unstructured index
- ○ Non clustered index

Clear selection

In a _____ index, an index entry appears for only some of the search-key values.

- ○ Dense
- ◉ Sparse
- ○ Straight
- ○ Continuous

Clear selection

What is NOT true about index?

- ○ Indexes should not be used on columns that contain a high number of NULL values.
- ○ Indexes are special lookup tables that can be used by the database search engine to speed up data updates.
- ○ Implicit indexes are indexes that are automatically created by the database server when an object is created.
- ○ Indexes take memory slots which are located on the disk.

Five node splitting operations occurred when an entry is inserted into a B-tree. Then how many nodes are written?

- ◉ 11
- ○ 7
- ○ 14
- ○ 13

Clear selection

Out of the following options, select the correct command for CREATING an index?

- (●) CREATE INDEX index_name ON table_name;
- ( ) CREATE INDEX index_name ON database_name;
- ( ) INSERT INDEX index_name ON table_name;
- ( ) INSERT INDEX index_name ON database_name;

Clear selection

which of the following is TRUE ?

- ( ) BCNF with Dependency preservation is always possible.
- (●) A relation with only two attributes is in BCNF.
- ( ) No relation can be in both 3NF and BCNF.
- ( ) If every attribute of relation R is Prime attribute then R is always in BCNF.

Clear selection

The form of dynamic hashing that avoids the additional level of indirection is called as

- (●) Linear hashing
- ( ) Static hashing
- ( ) Directive hashing
- ( ) Indirective hashing

Clear selection

Bitmap indices are a specialized type of index designed for easy querying on _____

- ○ Bit values
- ○ Binary digits
- ◉ Multiple keys
- ○ Single keys

Clear selection

Which of the following is true?

- ○ B + tree allows only the rapid random access
- ○ B + tree allows only the rapid sequential access
- ◉ B + tree allows rapid random access as well as rapid sequential access
- ○ B + tree allows rapid random access and slower sequential access

Clear selection

Out of the following options, select the correct command for DROPPING an index in SQL?

- ◉ DROP INDEX index_name table_name;
- ○ DELETE INDEX index_name;
- ○ DROP INDEX index_name;
- ○ DROP INDEX table_name index_name;

Clear selection

State True or False. There is always a decomposition into Boyce-codd normal form that is lossless and dependency preserving. *

- ○ True
- ◉ False

A time period during which database fact is valid is called?

- ○ Interval Time
- ○ Available Time
- ○ Acquired Time
- ◉ Valid Time

Clear selection

In a relational data model, which one of the following statements is TRUE?

- ◉ Relation with 2 attributes always in BCNF
- ○ If all attributes of a relation are prime attributes, then the relation is in BCNF
- ○ BCNF decompositions preserve functional dependencies.
- ○ Every relation has at least one non-prime attribute.

Clear selection

*

Consider the following implications relating to functional and multivalued dependencies given below, which may or may not be correct.

i. if $A \rightarrow\rightarrow B$ and $A \rightarrow\rightarrow C$ then $A \rightarrow BC$
ii. if $A \rightarrow B$ and $A \rightarrow C$ then $A \rightarrow\rightarrow BC$
iii. if $A \rightarrow\rightarrow BC$ and $A \rightarrow B$ then $A \rightarrow C$
iv. if $A \rightarrow BC$ and $A \rightarrow B$ then $A \rightarrow\rightarrow C$

Exactly how many of the above implications are valid?

- ○ 0
- ○ 1
- ○ 2
- ○ 3

Which of these forms has a relation that possesses the data and information about every individual entity? *

- ○ 5NF
- ◉ 4NF
- ○ 3NF
- ○ 2NF

What is the maximum number of keys that a B+ -tree of order 3 and of height 3 have?

- ○ 3
- ○ 80
- ○ 27
- ◉ 26

Clear selection

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