

=====What is database=====

Database is an organised collection of data,
so it can be easily accessed and managed.

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====What is primary key=====

Primary key is the coloumns of data that
contains values that can be used to uniquely
identify each row in that table.

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=====what is candidate key=====

A candidate key in a table can be used
to identify each elements of the table
without getting the help of other data.
It can also be used as a primary key.

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====what is foreign key=====

Foreign key is a field in one table which
represents the primary key in another table.

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=====what is normalization=====

Normalization is the process of organizing
data in a database.It is used to create smaller
tables from the larger tables.also it is used
to reduce the redundancy of the database.

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=====what is 1nf,2nf,3nf,bcnf=====

1NF:

Each table cell should contain single values.

Each records should be unique.

2NF:

The table should be in 1NF form.

There should be a single coloumn candidate key which does not depend upon any subsets of the candidate key.

3NF form:

The table should be 2NF form.

There must not have any transitive functional dependencies.

BCNF form:

Even when the table is in third normal form there maybe more than one candidate keys.

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=====what do you mean by joins=====

A join clause is used to combine rows from two or more tables based on a related coloumn between them.

The inner join keyword is used to select records that have matching values in both tables.

The outer join is used to return all the records that have values in either right or the left table.

Left join returns all the rows from the left table
and also matching rows from the right table too.

Right join returns all the rows from the right table
and also matching rows from the left table too.

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how to create a table

```
cur.execute("CREATE TABLE IF NOT EXISTS category  
(cid INTEGER PRIMARY KEY AUTOINCREMENT,name text)")
```

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what is rdbms

a relational database is a type of database which
stores data and provides access to the data that are
related to each other.

rdbms is a database concept which helps us to fetch
data from a relational database.

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difference between rdbms and dbms

DBMS stores data as a file || Rdbms
stores data in a tabular manner.

Normalisation is not present in DBMS

Normalisation is present in RDBMS.

DBMS supports handling of small amount of data and it is for single user only.

RDBMS supports a large amount of data and it can be used by multiple users.

DBMS doesn't support distributed database

RDBMS supports distributed database.

example of DBMS are file system,xml

example of RDBMS are mysql,postgresql.

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=====full form of sql=====

Structured query language.

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what is dml,ddl

DML stands for data manipulation language.

It is used to manipulate the data itself.

it's like insert update delete operation in database.

DDL stands for data definition language.

It is used to create database schema and constraints and users itself commands like

create are example of ddl.

DCL stands for data control language. It is used to define access of the persons inside the database.

Grant and Revoke commands are example of DCL.

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what are acid properties.

ACID properties

atomicity is used to ensure a process is done at once or failed

Consistency is used to make the operations consistent

Isolation means multiple operations can be conducted at the same time.

Durability ensures that the operations after being executed the system integrity is maintained.

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=====what is key in sql?=====

A key in SQL is value that can be used to identify a record uniquely.

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JOIN is used to combine two or more set of select outputs

what is an E-r diagram

NORMALIZATION

functional dependency

1-nf 2nf 3nf bcnf

sql data types.

sql indexes.

ddl,dml

sql unions and joins types

composite key

difference between where and having clause