Assignment

Ans1.

Relational base data management is used to link table to form relationships for the same.

It is used in industries as a management layer for which complete software is in physical location.

Ans2.

 The primary key or alternate key is referred to as the related column. If a table has both a primary and alternate key, you can use either one as the basis of a table relationship. The foreign key is referred to as the source column or just column.

Ans3.

Relationships is important to link the data so that to reduce redundancy and give the output from the table in short time

Relationship are of three types

1. 1:1 relationship

Here each member of domain can link to only one member of co domain

1. 1:Many relationship

Here each member of domain can be link to one or more member of co domain

1. Many :Many relationship

Here domain can link to different types of co-domain.

Ans4.

Key is the combination of either one column or multiple column to identify the each row uniquely

Super key

It is a collection of all possible keys in the given element

Candidate key

Is a subset of super key which can derive each and every element as super key.

Primary key

It is one of the candidate key

Alternate key

By choosing one key from the candidate key the remaing candidate key is known as alternate key

Composite Key

Primary key not find simple column means it is not unique not having any single key eligible

Artificial Key

It is made when

1. No primary key is possible
2. Composite Primary key is too long

Ans

The **single-responsibility principle** (**SRP**) is a computer programming principle that states that "A module should be responsible to one, and only one, actor."[[1]](https://en.wikipedia.org/wiki/Single-responsibility_principle#cite_note-1) The term actor refers to a group (consisting of one or more stakeholders or users) that requires a change in the module.

Ans

1. Updation Anomaly
2. Deletion Anomaly
3. Insertion Anomaly

Ans

Angenda to reduce redundancy to reduce duplicate data via normalization

Ans

Different types of nornalization

1. 1NF

No cell in the table in multiple value

There should be a primary Key

1. 2N

Identify the column which have partial functional dependency

Breakout those column to create new table

3 3NF

It should be in 2 nd Normal form

There should be transitive dependency

4 BCNF

The table is already in third normal form

x->y here y should be the common column and x should be the part of primary key

Ans

Joins are used to combine data from multiple table

It is used to used single table to fetch the information from other table

Ans

The different Types of joins are

1. Inner join

Common data between two table

2 Full Join

The complete data within the full table

3 left join

We get common and left side data

4 Right Join

We get right side data without the common data.