Sixth Chapter Lesson-8: Database Relation and its classification.

At the end of this lesson-

- 1. You will be able to explain database relations.
- 2. You will be able to describe the conditions of database relation.
- 3. You will be able to explain classification of database relation.

Database Relation: Relation between records of a table with the records of another table of a database is called database relation.

Condition for making database relation:

- There must be one common field between relational tables and data type, field size and format must be the same for that common field.
- There must have a primary key field on at least one of the relational tables.

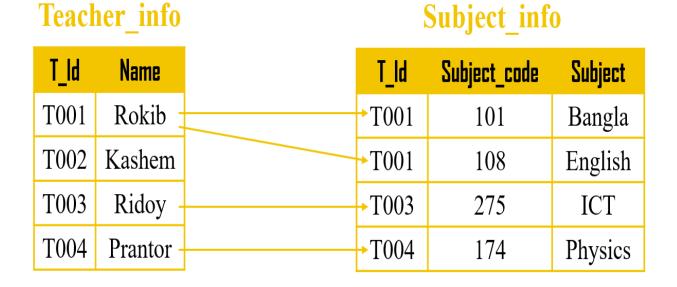
Types of database relation: There are four types of database relation. They are -

- One to One
- One to Many
- Many to One
- Many to Many

One to One Relation: If a record of a relational table is related to only one record of another relational table, the relation between them is called one to one relation.

Teacher info Subject info T_ld Name T_ld Subject_code Subject T001 Rokib T001 Bangla 101 T002 Kashem T002 108 English T003 Ridoy T003 **ICT** 275 Physics T004 Prantor T004 174

One to Many Relation: If a record of a relational table is related to multiple records of another relational table, the relation between them is called one to many relation.



Many to One Relation: If multiple records of a relational table are related to one record of another relational table, the relation between them is called many to one relation.

Teacher_info

Subject_info

T_ld	Name	Subject_code	Subject_code	Subject
T001	Rokib	101 🔸	101	Bangla
T002	Kashem	101 🚣	108	English
T003	Ridoy	275 🔸	- 275	ICT
T004	Prantor	174 🔸	174	Physics

Many to Many: If multiple records of a relational table are related to multiple records of another relational table, the relation between them is called many to many relation.

T ld	Name				ر.	ıbject_code	Subject
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T001	Rokib				=	101	Bangla
T002	Kashem					108	English
T003	Ridoy				-	275	ICT
T004	Prantor			0	→	174	Physics
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		T_ld	Subject_code	Day		· ·	_
		T001	101	Sat			
		T002	101	Sun			
		T003	275	Mon			
		T003	174	Tue			

Lesson Evaluation-

Knowledge Based Questions:

- a.What is database relation?
- a. What is database relationship?

Comprehension Based Questions:

- b. Write down the conditions for making relations between two tables.
- b. 'There is a condition for making relation between two tables' explain.

Creative Questions:

Read the stem and answer the following question:

Student Information Result Sheet

Roll	Name	Address
01	Rana	Dhaka
02	Kamal	Bogra
03	Rana	Bogra

Roll	Name	GPA
01	Rana	5.00
02	Kamal	4.70
03	Rana	5.00

d. Which type of relation exists between the above two tables? Analyze with argument.

Multiple Choice Questions: