

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

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## 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

T_Id	Name
T001	Rokib
T002	Kashem
T003	Ridoy
T004	Prantor

### Subject\_info

T_Id	Subject_code	Subject
T001	101	Bangla
T002	108	English
T003	275	ICT
T004	174	Physics

**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.

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### Teacher\_info

### Joining\_info

### Subject\_info

T_Id	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	Roll	Name	GPA
01	Rana	Dhaka	01	Rana	5.00
02	Kamal	Bogra	02	Kamal	4.70
03	Rana	Bogra	03	Rana	5.00

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

### Multiple Choice Questions: