

Week#2

Relational Data Model & the CREATE TABLE Statement

Basics of Relational Databases:-

Relational Databases consists of Databases
Tables, rows & Columns.

- Matching value is used to match relations b/w tables.
- Table, row & column \Rightarrow relation, Tuple & Attribute

Integrity rules:-

- Entity integrity: primary keys
 - \Rightarrow Each table has columns with unique values.
 - \Rightarrow No missing values for primary keys.
 - \Rightarrow Ensure traceable entities.
- Referential integrity: foreign keys.
 - \Rightarrow values of a column in one table match values from a source table.
 - \Rightarrow Ensures valid references among tables.

Basic SQL :-

CREATE Table Offering (

OfferNo INTEGER not null,

CourseNo char(6) not null,

OffTime varchar(10),

FacNo char(11)

CONSTRAINT OfferingPK PRIMARY KEY (OfferNo),

CONSTRAINT CourseFK Foreign KEY (CourseNo)
REFERENCES Course (CourseNo),

CONSTRAINT FacultyFK Foreign KEY (FacNo)
REFERENCES Faculty (FacNo)

CONSTRAINT OffTimecheck CHECK (OffTime > 8)

Integrity Constraint Syntax:-

Constraint Set include:

PRIMARY KEY
FOREIGN KEY
UNIQUE
NOT NULL
CHECK