Base Relation & View

- Base relation
  - A named relation of an entity in conceptual schema.
  - Tuples stored in physical database.
- View
  - Virtual relation
  - Dynamically generated for end user
  - Not stored in physical database

Purpose of views

- Security
  - Data can be hidden
- User friendly report
  - Data shown can be as per the user's preferences.
- Performance
  - Operations become simplified.

Integrity Rules

- Types of integrity
  - Entity integrity
    - In a base relation, no attribute of a primary key can be null.
  - Referential integrity
    - If a foreign key exits in a relation, either the foreign key value must match a key value of some tuple in its home relation or the foreign key value must be wholly null.

Types of constraint

- **Domain constraint**
  - Restrictions on a set of values allowed for the attributes of relations.
- **Enterprise constraint (business rule)**
  - Additional rules specified by the users or database administrators of a database.

- Class Activity:
  - Assume that the Addis Ababa University College of Commerce wants to develop a database system.
  - Identify the following in the case of each user:
    - Data needed
    - Transactions performed
  - Users:
    - Registrar
    - Departments
    - Instructors
    - Students
    - Program officer