6.3-Dimensional Modeling Advanced Concepts

Identity Table Types

1. **tblBeehive**
    - **Definition:** Represents individual beehives.
    - **Main Table Types:** Dimension
    - **Role:** Provides detailed information about each beehive, such as hive number, population, and age.
2. **tblHoneyProduction**
    - **Definition:** Records honey production data.
    - **Main Table Types:** Fact
    - **Role:** Captures measurable data related to honey production, linked to specific beehives.
3. **tblLocation**
    - **Definition:** Details the location of beehives.
    - **Main Table Types:** Dimension
    - **Role:** Provides contextual information about the environment and state where beehives are located.
4. **tblBeekeeper**
    - **Definition:** Contains information about beekeepers.
    - **Main Table Types:** Dimension
    - **Role:** Stores data about beekeepers, including their names and the hives they manage.
5. **tblBeePopulation**
    - **Definition:** Tracks bee population data.
    - **Main Table Types:** Fact
    - **Role:** Records population metrics for beehives over time.

Dimensional Entity Dictionary

tblBeehive = Beehive

- **Definition:** Represents individual beehives.
- **Main Table Types:** Dimension
- **Logical Name:** t_beehive_dim
- **Plain English Name:** Beehive Dimension

tblHoneyProduction = Honey Production

- **Definition:** Records honey production data.
- **Main Table Types:** Fact
- **Logical Name:** t_honey_prod_fact
- **Plain English Name:** Honey Production Fact

tblLocation = Location

- **Definition:** Details the location of beehives.
- **Main Table Types:** Dimension
- **Logical Name:** t_location_dim
- **Plain English Name:** Location Dimension

tblBeekeeper = Beekeeper

- **Definition:** Contains information about beekeepers.
- **Main Table Types:** Dimension
- **Logical Name:** t_beekeeper_dim
- **Plain English Name:** Beekeeper Dimension

tblBeePopulation = Bee Population

- **Definition:** Tracks bee population data.
- **Main Table Types:** Fact
- **Logical Name:** t_bee_pop_fact

- **Plain English Name:** Bee Population Fact

Database Naming Convention

- **Prefix:**
    - t_ for tables
    - dim for dimension tables
    - fact for fact tables
- **Naming Structure:**
    - Use underscores to separate words.
    - Use lowercase letters for consistency.
    - Use a consistent prefix to denote the type of table
    - Use short but descriptive names

Example Naming Convention

- **Dimension Tables:**
    - Beehive Dimension: t_beehive_dim
    - Location Dimension: t_location_dim
    - Beekeeper Dimension: t_beekeeper_dim
- **Fact Tables:**
    - Honey Production Fact: t_honey_prod_fact
    - Bee Population Fact: t_bee_pop_fact