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-- Referential Integrity (RI) - DBMS Enforcement of the Parent-Dependent relationship
--                           ie. DBMS Ensure that every foreign key value has a matching primary key
--
-- A Primary Key specified for a table makes it a potential parent table in an RI relationship
--               it's not a parent until a foreign key matches to it (it has a dependent)
--
-- A Foreign Key specified for a table makes it a dependent in an RI relationship
--
--          the Customer table is a dependent of the User table
--          uid column in Customer is a Foreign Key to the Primary Key of the code column in User
--          the database manager will ensure every value in the uid column of Customer
--                                has matching value in uid column of User
--
-- Referential Intergrity (Parent/Dependent relationship) limits what INSERT, UPDATE and DELETE can do
--      RI adds constraints to INSERT, UPDATE, DELETE)
--
-- INSERT - parent table - always allowed
--          dependent table - allowed only if the foreign already has a matching primary key in the parent
--
--          we can always INSERT a row to the User table
--          we can only INSERT a row into the Customer table if it's uid matches a uid in User
--
-- UPDATE - parent - a Primary Key cannot be updated if it has existing dependents (at least one Foreign Key matches it)
--                   UNLESS the update CASCADE option is specified for the parent table
--                          which means the Primary Key value can change and all matching Foreign Key values will also change
--
--          dependent - a Foreign Key may only be changed to an existing Primary Key value
--
-- DELETE - parent - a parent row cannot be deleted if it's Primary Key has matching Foreign Keys
--                   UNLESS the DELETE SET NULL option is specified for the parent table
--                          which means all Foreign Keys matching the Primary will be set to NULL
--                          the null value in the Foreign Key must be changed to match an existing Primary Key
--                                       before you can do anything with the dependent table
--                          for DELETE SET NULL to be valid, the Foreign Key cannot be defined a UNIQUE or NOT NULL
--                                            it also cannot be part of the Primary Key of the dependent table
--                   OR the DELETE CASCADE option is specified for the parent table
--                          which means a delete of a parent rows also deletes all dependent rows (DANGEROUS!)
--
--  TLDR: If tables have Primary Keys and Foreign Keys you may not be able to do certain INSERT, UPDATE, DELETE operations
--
--  UNIQUE   - Column value must be unique with the table
--
--  PRIMARY KEY - Column is part of the unique identifier for a row in the table
--                UNIQUE and NOT NULL are implied
--
--  FOREIGN KEY - Column is part of a foreign key for the table.
--                Value must have a matching value in the primary key of the parent table
--                Establishes the parent-dependent relationship
--
--  CHECK  -  Specifies acceptable values for a column - any simple WHERE predicate is allowed
--
--  DEFAULT - Specify a default value for column if no value is supplied on INSERT
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-- Unit Of Work (UOW) - A recoverable sequence of operations within an application process
--
-- START TRANSACTION - Mark the start of a unit of work
--
-- COMMIT - End a unit of work and save changes - automatically done if no errors
--
-- ROLLBACK - End a unit of work and undo changes - automatically done if errors
```