Govt. Engineering College Wayanad
Department of Computer Science and Engineering
Application Software Development Lab Questions- Week 2

EXP1: One-To-Many Relationship

Consider the database for an organisation that supply products. Suppose that each product has one supplier, and each supplier supplies one or more products
Write the queries for the following

- Create the database organisation
- Select the current database
- Create the following tables.
  a. suppliers (supplierID, name, phone number).
  b. products (productID, productCode, name, quantity, price, supplierID)
- Set supplierID as the primary key for the table suppliers
- Set the supplierID column of the products table as a foreign key references the supplierID column of the suppliers table
- Insert values in to suppliers table
  (501, 'ABC Traders', '88881111')
  (502, 'XYZ Company', '88882222')
  (503, 'QQ Corp', '88883333')
- Insert values in to product table
  (2001, 'PEC','Pencil 3B',500, 0.52, 501)
  (2002, 'PEC','Pencil 4B',600, 0.53, 501)
  (2003, 'PEC','Pencil 5B',600, 0.54, 502)
  (2004, 'PEC','Pencil 6B',500, 0.55, 503)
- List all the tables in the current database
- Display the structure of the suppliers and products table
- Drop the tables
- Delete the database

EXP2: Many-To-Many Relationship

Consider the database for an organisation that supply products. Suppose that a product has many suppliers and a supplier supplies many products.
Write the query for the following:

- Create the database organisation
- Select the current database
- Create the following table

- ➢ suppliers (supplierID, name, phone number).
- ➢ products (productID, productCode, name, quantity, price)
- ➢ products_suppliers (productID, supplierID)

- Set productID and supplierID as forien key for the table products_suppliers
- Insert values in the supplier table

  (501, 'ABC Traders', '88881111')
  (502, 'XYZ Company', '88882222')
  (503, 'QQ Corp', '88883333').

- Insert values into the products table

  (2001, 'PEC','Pencil 3B',500, 0.52)
  (2002, 'PEC','Pencil 4B',600, 0.53)
  (2003, 'PEC','Pencil 5B',600, 0.54)
  (2004, 'PEC','Pencil 6B',500, 0.55)

- Insert the productID and supplierID into products_supplier table
- List all the tables in the current database
- Display the structure of the suppliers, products_supplier and products table
- Display all details of product with id 2002
- Drop the tables
- Delete the database

EXP3: One-to- One Relationship

Consider the database for an organisation that supply products. Suppose that some products have *optional* data (e.g. comment). Instead of keeping these optional data in the products table, it is more efficient to create another table called product_details, and link it to products with a *one-to-one relationship*

- Create the database organisation
- Select the current database
- Create the following tables.
  a. suppliers (supplierID, name, phone number).
  b. products (productID, productCode, name, quantity, price, supplierID)
  C. products_suppliers (productID, supplierID)
  d. product_details**(**productID,comment**)**
- Set supplierID as the *primary key* for the table suppliers
- Set the supplierID column of the products table as a foreign key references the supplierID column of the suppliers table

- Set the productID column of the product_details table as a foreign key references the productID column of the product table
- Insert values in to suppliers table

  (501, 'ABC Traders', '88881111')
  (502, 'XYZ Company', '88882222')
  (503, 'QQ Corp', '88883333')
- Insert values in to product table

  (2001, 'PEC','Pencil 3B',500, 0.52, 501)
  (2002, 'PEC','Pencil 4B',600, 0.53, 501)
  (2003, 'PEC','Pencil 5B',600, 0.54, 502)
  (2004, 'PEC','Pencil 6B',500, 0.55, 503)
- List all the tables in the current database
- Display the structure of the suppliers and products table
- Display name of all product supplied by ABC Traders
- Drop the tables
- Delete the database