**SQL Database Project: SplashSteps Kids Rain Boots**

**Company Background**

SplashSteps is a growing children's rain boot company with multiple retail locations across the country. They need a database system to track their operations, from managing employees and branches to recording sales and supplier relationships.

**Task**

Design and implement a database structure for SplashSteps that captures all their business requirements. You'll need to create tables, establish relationships, and write queries to extract meaningful business insights.

**Business Requirements:**

**Branch Management:**

* SplashSteps operates multiple retail branches
* Each branch has a unique branch ID, name, and one employee who serves as the branch manager
* Track when each manager started their management role

**Employee Information:**

* Store employee details: name, date of birth, gender, salary, and unique employee ID
* Each employee works at exactly one branch
* Employees can supervise other employees (either at their branch or other branches)
* Each employee can have at most one supervisor

**Customer Relationships:**

* Each customer has a name and unique customer ID
* Customers are assigned to specific branches for service
* One customer can only be served by one branch at a time

**Sales Tracking:**

* Employees sell rain boots to customers assigned to their branch
* Multiple employees can work with the same customer
* Track the dollar amount of sales each employee makes to each customer

**Supplier Management:**

* Branches purchase inventory from suppliers
* Each supplier has a name and specializes in specific product types (rubber boots, waterproof materials, etc.)
* One supplier can work with multiple branches
* Track which suppliers provide what products to which branches

**Sample Data to Insert:**

**Branches:**

* Branch 1: "Downtown Portland", Manager: Sarah Chen (started 2023-01-15)
* Branch 2: "Seattle Center", Manager: Mike Rodriguez (started 2022-08-20)
* Branch 3: "Vancouver Mall", Manager: Lisa Johnson (started 2023-03-10)

**Employees:**

* Sarah Chen, DOB: 1985-06-12, Female, Salary: $65000, Branch 1, Manager
* Mike Rodriguez, DOB: 1988-03-22, Male, Salary: $62000, Branch 2, Manager
* Lisa Johnson, DOB: 1990-09-05, Female, Salary: $58000, Branch 3, Manager
* Tom Wilson, DOB: 1992-11-18, Male, Salary: $42000, Branch 1, Supervisor: Sarah
* Emma Davis, DOB: 1995-07-30, Female, Salary: $38000, Branch 1, Supervisor: Sarah
* James Park, DOB: 1991-01-14, Male, Salary: $44000, Branch 2, Supervisor: Mike
* Rachel Green, DOB: 1993-04-25, Female, Salary: $40000, Branch 2, Supervisor: Mike
* Alex Thompson, DOB: 1994-12-08, Male, Salary: $39000, Branch 3, Supervisor: Lisa
* Maria Lopez, DOB: 1996-02-17, Female, Salary: $37000, Branch 3, Supervisor: Lisa

**Customers:**

* The Anderson Family, Customer ID: 1001, Branch 1
* The Smith Family, Customer ID: 1002, Branch 1
* The Johnson Family, Customer ID: 1003, Branch 1
* The Williams Family, Customer ID: 1004, Branch 2
* The Brown Family, Customer ID: 1005, Branch 2
* The Davis Family, Customer ID: 1006, Branch 2
* The Miller Family, Customer ID: 1007, Branch 3
* The Wilson Family, Customer ID: 1008, Branch 3
* The Moore Family, Customer ID: 1009, Branch 3
* The Taylor Family, Customer ID: 1010, Branch 1

**Suppliers:**

* RubberTech Industries, Product: "Rubber Soles"
* Waterproof Solutions Inc., Product: "Waterproof Fabric"
* ColorBright Materials, Product: "Boot Paint"
* FlexiPlastic Corp, Product: "Buckles and Straps"
* ComfortFoam LLC, Product: "Insole Padding"

**Sales Records:**

* Sarah Chen sold $450 to Anderson Family
* Tom Wilson sold $230 to Smith Family
* Emma Davis sold $320 to Johnson Family
* Mike Rodriguez sold $380 to Williams Family
* James Park sold $290 to Brown Family
* Rachel Green sold $410 to Davis Family
* Lisa Johnson sold $350 to Miller Family
* Alex Thompson sold $275 to Wilson Family
* Maria Lopez sold $195 to Moore Family

**Supplier-Branch Relationships:**

* Branch 1 works with: RubberTech Industries, Waterproof Solutions Inc., ColorBright Materials
* Branch 2 works with: RubberTech Industries, FlexiPlastic Corp, ComfortFoam LLC
* Branch 3 works with: Waterproof Solutions Inc., ColorBright Materials, FlexiPlastic Corp

**Key Deliverables:**

1. Create the database schema (tables with appropriate columns and data types)
2. Define relationships between tables (primary keys, foreign keys)
3. Write INSERT statements using the sample data provided above
4. Create queries to answer business questions like:
   * Which employees are the top sellers at each branch?
   * What suppliers does each branch work with?
   * Who are the managers and when did they start?