Title: Implement SCD Type 4

—Creation of suppliers table

CREATE TABLE Suppliers\_jyothi (

    SupplierID INT PRIMARY KEY,

    SupplierName VARCHAR(100),

    ContactName VARCHAR(100),

    Phone VARCHAR(20),

    Address VARCHAR(200)

);

-- Insert data in suppliers table

INSERT INTO Suppliers\_jyothi (SupplierID, SupplierName, ContactName, Phone, Address)

VALUES

(1, 'Tech Supplies Inc.', 'Alice Cooper', '123-555-0101', '100 Tech Ave'),

(2, 'Home Appliances Co.', 'Bob Barker', '234-555-0202', '200 Appliance Rd'),

(3, 'Furniture World', 'Charlie Brown', '345-555-0303', '300 Furniture Blvd'),

(4, 'Gadget Central', 'David Lee', '456-555-0404', '400 Gadget St'),

(5, 'Office Essentials', 'Eva Green', '567-555-0505', '500 Office Park'),

(6, 'Smart Electronics', 'Frank White', '678-555-0606', '600 Electronics Pl'),

(7, 'Tech Gadgets Ltd.', 'Grace Hall', '789-555-0707', '700 Gadget Ln'),

(8, 'Blender Inc.', 'Hannah Scott', '890-555-0808', '800 Blend St'),

(9, 'Audio Tech', 'Ian Taylor', '901-555-0909', '900 Audio Dr'),

(10, 'Laptop Warehouse', 'Jack Carter', '012-555-1000', '1000 Laptop Rd');

SELECT \* FROM Suppliers\_jyothi

—Creation of Incoming suppliers table

CREATE TABLE Incoming\_Suppliers\_Jyothi (

    SupplierID INT PRIMARY KEY,

    SupplierName VARCHAR(100),

    ContactName VARCHAR(100),

    Phone VARCHAR(20),

    Address VARCHAR(200)

);

-- Insert data in Incoming suppliers table

INSERT INTO Incoming\_Suppliers\_Jyothi (SupplierID, SupplierName, ContactName, Phone, Address)

VALUES

(1, 'Tech Supplies Inc.', 'Alice rown', '123-555-0101', '100 Tech Ave'),

(2, 'Home Appliances Co.', 'Bob Barker', '234-555-0202', '900 Appliance Rd'),

(3, 'Furniture World', 'Charlie Brown', '345-555-0303', '500 Furniture')

select \* from Incoming\_Suppliers\_Jyothi

—Creation of History suppliers table

CREATE TABLE HistorySuppliers\_Jyothi (

    SupplierID INT PRIMARY KEY,

    SupplierName VARCHAR(100),

    ContactName VARCHAR(100),

    Phone VARCHAR(20),

    Address VARCHAR(200),

    UpdatedDate date

);

-- Move current record to historical table

INSERT INTO HistorySuppliers\_Jyothi (SupplierID, SupplierName, ContactName, Phone, Address,UpdatedDate)

SELECT SupplierID, SupplierName, ContactName, Phone, Address,Getdate() as currentdate

FROM Suppliers\_jyothi

WHERE SupplierID in (select SupplierID from Incoming\_Suppliers\_Jyothi);

-- Update current table

MERGE INTO [dbo].[Suppliers\_jyothi] AS target

USING [dbo].[Incoming\_Suppliers\_Jyothi] As source

ON target.supplierID = source.supplierID

WHEN MATCHED THEN

    UPDATE SET

        target.supplierName = source.supplierName,

        target.ContactName = source.ContactName,

        target.Phone = source.Phone,

        target.Address = source.Address

WHEN NOT MATCHED THEN

    INSERT (supplierID,supplierName,contactname,Phone,address)

    VALUES(source.supplierID,source.supplierName, source.contactname,source.phone,source.address);

- -Desired outcomes

A screenshot of a computer

Description automatically generated

| **SupplierID** | | **SupplierName** | | **ContactName** | | **Phone** | | **Address** |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1 | Tech Supplies Inc. | | Alice rown | | 123-555-0101 | | 100 Tech Ave | |
| 2 | Home Appliances Co. | | Bob Barker | | 234-555-0202 | | 900 Appliance Rd | |
| 3 | Furniture World | | Charlie Brown | | 345-555-0303 | | 500 Furniture | |
| 4 | Gadget Central | | David Lee | | 456-555-0404 | | 400 Gadget St | |
| 5 | Office Essentials | | Eva Green | | 567-555-0505 | | 500 Office Park | |
| 6 | Smart Electronics | | Frank White | | 678-555-0606 | | 600 Electronics Pl | |
| 7 | Tech Gadgets Ltd. | | Grace Hall | | 789-555-0707 | | 700 Gadget Ln | |
| 8 | Blender Inc. | | Hannah Scott | | 890-555-0808 | | 800 Blend St | |
| 9 | Audio Tech | | Ian Taylor | | 901-555-0909 | | 900 Audio Dr | |
| 10 | Laptop Warehouse | | Jack Carter | | 012-555-1000 | | 1000 Laptop Rd | |