Assessment approach:

1. Create table queries

CREATE TABLE Table_India (

Customer_Name NVARCHAR(255),

Customer_ID NVARCHAR(18),

Open_Date DATE,

Last_Consulted_Date DATE,

Vaccination_Type CHAR(5),

Doctor_Consulted NVARCHAR(255),

State CHAR(5),

Country CHAR(5),

Post_Code INT,

DOB DATE,

Active_Customer CHAR(1),

Age AS DATEDIFF(YEAR, DOB, GETDATE()), -- Calculating Age based on DOB

Days_Since_Last_Consultation AS DATEDIFF(DAY, Last_Consulted_Date, GETDATE()) -- Calculating days since last consulted

);

*SELECT ***

FROM INFORMATION_SCHEMA.TABLES

WHERE TABLE_NAME = 'Staging_Table';

CREATE TABLE Staging_Table (

Customer_Name NVARCHAR(255),

Customer_ID NVARCHAR(18),

Open_Date DATE,

Last_Consulted_Date DATE,

```
    Vaccination_Type CHAR(5),

    Doctor_Consulted NVARCHAR(255),

    State CHAR(5),

    Country CHAR(5),

    Post_Code INT,

    DOB DATE,

    Active_Customer CHAR(1)

);
```

2. Create the above tables with additional derived columns: age and days since last consulted >30

```
INSERT INTO Table_India (Customer_Name, Customer_ID, Open_Date, Last_Consulted_Date, Vaccination_Type,

                Doctor_Consulted, State, Country, Post_Code, DOB, Active_Customer)
SELECT

    Customer_Name,

    Customer_ID,

    CAST(Open_Date AS DATE),

    CAST(Last_Consulted_Date AS DATE),

    Vaccination_Type,

    Doctor_Consulted,

    State,

    Country,

    Post_Code,

    CAST(DOB AS DATE),

    Active_Customer
FROM Staging_Table
WHERE Country = 'IND' AND DATEDIFF(DAY, Last_Consulted_Date, GETDATE()) > 30;
```

3. Create necessary validations

-- Update Table_India with the latest consultation data

UPDATE t

SET Last_Consulted_Date = s.Last_Consulted_Date

FROM Table_India t

JOIN Staging_Table s

ON t.Customer_ID = s.Customer_ID

WHERE s.Last_Consulted_Date > t.Last_Consulted_Date;

- Check if Customer_ID or Customer_Name are null

*SELECT **

FROM Staging_Table

WHERE Customer_ID IS NULL OR Customer_Name IS NULL;

-- Validate that customers with 'IND' as the country are loaded into Table_India

*SELECT **

FROM Staging_Table

WHERE Country = 'IND' AND Customer_ID NOT IN (SELECT Customer_ID FROM Table_India);

-- Example: Inserting 10,000 records at a time

WHILE EXISTS (SELECT TOP 1 1 FROM Staging_Table WHERE Country = 'IND')

BEGIN

 INSERT INTO Table_India (Customer_Name, Customer_ID, Open_Date, Last_Consulted_Date, Vaccination_Type,

 Doctor_Consulted, State, Country, Post_Code, DOB, Active_Customer)

 SELECT TOP 10000

 Customer_Name,

 Customer_ID,

 CAST(Open_Date AS DATE),

 CAST(Last_Consulted_Date AS DATE),

 Vaccination_Type,

 Doctor_Consulted,

```
        State,

        Country,

        Post_Code,

        CAST(DOB AS DATE),

        Active_Customer

    FROM Staging_Table

    WHERE Country = 'IND';


END;
```