Problem Statement: Employee Hierarchy Generation: -

You are tasked with creating a stored procedure to generate an employee hierarchy based on the data stored in the EMPLOYEE_MASTER table. Additionally, you need to create a table named Employee_Hierarchy to store the final hierarchy output.

The EMPLOYEE_MASTER table contains information about employees, including their EmployeeID, the ID of the employee they report to (ReportingTo), and their email address (EmailID). However, the email addresses need to be split into first and last names, excluding the domain name.

Here are the specific requirements:

Stored Procedure (SP_hierarchy):

- Create a stored procedure named SP_hierarchy to generate the employee hierarchy.
- The procedure should truncate the Employee_Hierarchy table before processing to ensure a fresh insertion of the hierarchy data.
- The hierarchy should be generated recursively, starting from employees who do not report to anyone (i.e., have NULL in the ReportingTo column).
- For each employee in the hierarchy, calculate their level in the hierarchy.
- Split the email addresses into first and last names (excluding the domain name) and store them in separate columns.
- Insert the final hierarchy data into the Employee_Hierarchy table.

Employee_Hierarchy Table: Create a table named Employee_Hierarchy with the following schema:

- EMPLOYEEID: VARCHAR(20)
- REPORTINGTO: NVARCHAR(MAX)
- EMAILID: NVARCHAR(MAX)
- LEVEL: INT
- FIRSTNAME: NVARCHAR(MAX)
- LASTNAME: NVARCHAR(MAX)

Functions: Create two functions to extract first and last names from email addresses:

- Function to extract the first name: [FIRST_NAME]
- Function to extract the last name: [Last_Name]

Employee_Master(INPUT) Table: -

EmployeeID	ReportingTo	EmailID
H1	NULL	john.doe@example.com
H2	NULL	jane.smith@example.com
H3	John Smith H1	alice.jones@example.com
H4	Jane Doe H1	bob.white@example.com
H5	John Smith H3	charlie.brown@example.com
H6	Jane Doe H3	david.green@example.com
H7	John Smith H4	emily.gray@example.com
H8	Jane Doe H4	frank.wilson@example.com
H9	John Smith H5	george.harris@example.com
H10	Jane Doe H5	hannah.taylor@example.com
H11	John Smith H6	irene.martin@example.com
H12	Jane Doe H6	jack.roberts@example.com
H13	John Smith H7	kate.evans@example.com
H14	Jane Doe H7	laura.hall@example.com
H15	John Smith H8	mike.anderson@example.com
H16	Jane Doe H8	natalie.clark@example.com
H17	John Smith H9	oliver.davis@example.com
H18	Jane Doe H9	peter.edwards@example.com
H19	John Smith H10	quinn.fisher@example.com
H20	Jane Doe H10	rachel.garcia@example.com
H21	John Smith H11	sarah.hernandez@example.com
H22	Jane Doe H11	thomas.lee@example.com
H23	John Smith H12	ursula.lopez@example.com
H24	Jane Doe H12	victor.martinez@example.com
H25	John Smith H13	william.nguyen@example.com
H26	Jane Doe H13	xavier.ortiz@example.com
H27	John Smith H14	yvonne.perez@example.com
H28	Jane Doe H14	zoe.quinn@example.com
H29	John Smith H15	adam.robinson@example.com
H30	Jane Doe H15	barbara.smith@example.com

Employee_Hierarchy(OUTPUT) TABLE: -

EmployeeID	ReportingTo	EmailID	Level	FirstName	LastName
H1	NULL	john.doe@example.com	1	john	doe
H2	NULL	jane.smith@example.com	1	jane	smith
H3	John Smith H1	alice.jones@example.com	2	alice	jones
H4	Jane Doe H1	bob.white@example.com	2	bob	white
H7	John Smith H4	emily.gray@example.com	3	emily	gray
H8	Jane Doe H4	frank.wilson@example.com	3	frank	wilson
H15	John Smith H8	mike.anderson@example.com	4	mike	anderson
H16	Jane Doe H8	natalie.clark@example.com	4	natalie	clark
H29	John Smith H15	adam.robinson@example.com	5	adam	robinson
H30	Jane Doe H15	barbara.smith@example.com	5	barbara	smith
H13	John Smith H7	kate.evans@example.com	4	kate	evans
H14	Jane Doe H7	laura.hall@example.com	4	laura	hall
H27	John Smith H14	yvonne.perez@example.com	5	yvonne	perez
H28	Jane Doe H14	zoe.quinn@example.com	5	zoe	quinn
H25	John Smith H13	william.nguyen@example.com	5	william	nguyen
H26	Jane Doe H13	xavier.ortiz@example.com	5	xavier	ortiz
H5	John Smith H3	charlie.brown@example.com	3	charlie	brown
H6	Jane Doe H3	david.green@example.com	3	david	green
H11	John Smith H6	irene.martin@example.com	4	irene	martin
H12	Jane Doe H6	jack.roberts@example.com	4	jack	roberts
H23	John Smith H12	ursula.lopez@example.com	5	ursula	lopez
H24	Jane Doe H12	victor.martinez@example.com	5	victor	martinez
H21	John Smith H11	sarah.hernandez@example.com	5	sarah	hernandez
H22	Jane Doe H11	thomas.lee@example.com	5	thomas	lee
H9	John Smith H5	george.harris@example.com	4	george	harris
H10	Jane Doe H5	hannah.taylor@example.com	4	hannah	taylor
H19	John Smith H10	quinn.fisher@example.com	5	quinn	fisher
H20	Jane Doe H10	rachel.garcia@example.com	5	rachel	garcia
H17	John Smith H9	oliver.davis@example.com	5	oliver	davis
H18	Jane Doe H9	peter.edwards@example.com	5	peter	edwards