

Procedure description `dbo.usp_SalesPivotByMonth`

Business

This report shows total sales amounts broken down by region and month for a given year. Each column represents one month that actually had orders, and each row represents a sales region. It is used by managers or analysts who want a quick side-by-side comparison of how each region performed across the months of a specific year – for example, to spot seasonal trends or underperforming regions.

Technical

Input parameters:

- `@Year` INT – the calendar year for which the sales pivot report is generated

Used objects:

- `dbo.Orders` (table)
- `dbo.Region` (table)

Logic:

- Step 1: Build a dynamic column list by querying the distinct month names present in `dbo.Orders` for the given year, ordered by month number, using `STRING_AGG` and `QUOTENAME` to safely construct the column list
- Step 2: Construct a dynamic SQL string that joins `dbo.Orders` with `dbo.Region`, filters rows by the given year, and applies a `PIVOT` operator to transpose month names into columns, summing `TotalAmount` per Region per month
- Step 3: Execute the dynamic SQL via `sys.sp_executesql`, passing `@Year` as a parameter, and return the pivoted result set ordered by Region

Side effects:

none (read-only)

Diagram

