

Building SELECT lists with SQL

If you are using SQL for ingestion and you want to rename columns

PascalCase to snake_case

```
-- PascalCase to snake_case
-- , OtherNFLStats AS other_nfl_stats

SELECT
  CONCAT(', ', column_name, ' AS ', LOWER(
    REGEXP_REPLACE(
      REGEXP_REPLACE(column_name, '([a-z0-9])([A-Z])', '$1_$2'), -- Pass 1: Lower to Upper
      '([A-Z])([A-Z][a-z])', '$1_$2' -- Pass 2: Acronym to Word
    )
  )) AS formatted_column
FROM information_schema.columns
WHERE table_name = 'my_table'
  AND table_schema = 'my_schema'
ORDER BY ordinal_position;
```

PascalCase to snake_case with substitution

```
-- PascalCase to snake_case
-- , OverageAmount AS overage_amt
WITH RawColumns AS (
  SELECT column_name
    , LOWER(
```

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    REGEXP_REPLACE(
      REGEXP_REPLACE(column_name, '([a-z0-9])([A-Z])', '$1_$2')
      , '([A-Z])([A-Z][a-z])', '$1_$2'
    )
  ) AS snake_name
FROM information_schema.columns
WHERE table_name = 'my_table'
AND table_schema = 'my_schema'
)
SELECT CONCAT(', ', column_name, ' AS ',
  AGGREGATE( -- AGGREGATE is Spark-specific (thus applicable to databricks)
    -- Define the list of [pattern, replacement]
    ARRAY(
      STRUCT('_amount$' AS pat, '_amt' AS rep)
      , STRUCT('_percent$' AS pat, '_pct' AS rep)
      , STRUCT('_flag$' AS pat, '_flg' AS rep)
      , STRUCT('_code$' AS pat, '_cd' AS rep)
      , STRUCT('_number$' AS pat, '_nbr' AS rep)
      , STRUCT('_name$' AS pat, '_nm' AS rep)
      , STRUCT('_description$' AS pat, '_dsc' AS rep)
      , STRUCT('_desc$' AS pat, '_dsc' AS rep)
      , STRUCT('_date$' AS pat, '_dts' AS rep)
    )
      , snake_name -- Initial value
      , (acc, x) -> REGEXP_REPLACE(acc, x.pat, x.rep) -- Iterative function
    )
  ) AS formatted_column
FROM RawColumns
ORDER BY column_name;

```

snake_case to PascalCase + custom rules + suffix

```

-- snake_case to PascalCase with suffix substitution
WITH base AS (
  SELECT

```

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column_name
, CASE
    WHEN column_name LIKE '%\_%' THEN ARRAY_JOIN( TRANSFORM(SPLIT(LOWER(column_name), '_'), x ->
INITCAP(x) ), '' ) -- underscore to PascalCase
    ELSE INITCAP(column_name)
    END AS pascal_name
, ordinal_position
FROM my_catalog.information_schema.columns
WHERE table_schema = 'my_schema'
    AND table_name = 'my_table'
)
SELECT
CASE
-- Parsed Excel files
    WHEN column_name = '_FILENAME' THEN CONCAT(', ', 'regexp_extract(', column_name, ', \'^[^/]+$\', 0)', '
AS FileNM')
    WHEN column_name = '_ROW_NUM' THEN CONCAT(', ', column_name, ' AS RowNBR')
    WHEN column_name = '_SHEETNAME' THEN CONCAT(', ', column_name, ' AS SheetNM')
-- metadata cols
    WHEN column_name = 'hcsys_file_name' THEN CONCAT(', ', 'regexp_extract(', column_name, ', \'^[^/]+$\',
0)', ' AS FileNM') -- SourceHCSYSTEMFILENAME?
    WHEN column_name = 'hcsys_row_num' THEN CONCAT(', ', column_name, ' AS SourceHCSYSTEMROWNBR')
    WHEN column_name = 'meta_updated' THEN CONCAT(', ', column_name, ' AS EDWLastModifiedDTS')
    WHEN column_name = 'meta_deleted' THEN CONCAT(', ', column_name, ' AS MetaDeletedFLG')
    WHEN column_name = 'meta_surrogate_key' THEN CONCAT(', ', column_name, ' AS MetaSurrogateKeyID')
    WHEN column_name = 'meta_checksum' THEN CONCAT(', ', column_name, ' AS MetaChecksumID')
    WHEN column_name = 'meta_location' THEN CONCAT(', ', column_name, ' AS MetaLocationDSC')
-- Replace end word w/ suffix
    WHEN pascal_name RLIKE '(?i)Amount$' THEN CONCAT(', ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?i)Amount$', 'AMT'))
    WHEN pascal_name RLIKE '(?i)Percent$' THEN CONCAT(', ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?i)Percent$', 'PCT'))
    WHEN pascal_name RLIKE '(?i)Flag$' THEN CONCAT(', ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?i)Flag$', 'FLG'))
    WHEN pascal_name RLIKE '(?i)Code$' THEN CONCAT(', ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?i)Code$', 'CD'))
    WHEN pascal_name RLIKE '(?i)Number$' THEN CONCAT(', ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?i)Number$', 'NBR'))
    WHEN pascal_name RLIKE '(?i)Name$' THEN CONCAT(', ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?i)Name$', 'NM'))

```

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    WHEN pascal_name RLIKE '(?)Description$' THEN CONCAT(' ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?)Description$', 'DSC'))
    WHEN pascal_name RLIKE '(?)Desc$' THEN CONCAT(' ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?)Desc$', 'DSC'))
    WHEN pascal_name RLIKE '(?)Date$' THEN CONCAT(' ', try_to_timestamp(' ', column_name, ' \\'yyyy-MM-dd
HH:mm:ss\') AS ', REGEXP_REPLACE(pascal_name, '(?)Date$', 'DTS')) -- chg to try_to_date if no time data
    WHEN pascal_name RLIKE '(?)Count$' THEN CONCAT(' ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?)Count$', 'CNT'))
    WHEN pascal_name RLIKE '(?)Id$' THEN CONCAT(' ', column_name, ' AS ', REGEXP_REPLACE(pascal_name,
'(?i)Id$', 'ID'))
    WHEN pascal_name RLIKE '(?)Address1$' THEN CONCAT(' ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?)Address1$', 'Address01TXT'))
    WHEN pascal_name RLIKE '(?)Address2$' THEN CONCAT(' ', column_name, ' AS ',
REGEXP_REPLACE(pascal_name, '(?)Address2$', 'Address02TXT'))
    -- Appended suffixes
    WHEN pascal_name RLIKE '(?)Gender$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name,
'CD'))
    WHEN pascal_name RLIKE '(?)Age$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name, 'NBR'))
    WHEN pascal_name RLIKE '(?)Address$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name,
'TXT'))
    WHEN pascal_name RLIKE '(?)City$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name, 'NN'))
    WHEN pascal_name RLIKE '(?)State$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name, 'NN'))

    WHEN pascal_name RLIKE '(?)Zip$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name, 'CD'))
    WHEN pascal_name RLIKE '(?)Phone$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name,
'NBR'))
    WHEN pascal_name RLIKE '(?)Fax$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name, 'NBR'))
    WHEN pascal_name RLIKE '(?)Active$' THEN CONCAT(' ', column_name, ' AS ', CONCAT(pascal_name,
'FLG'))
    ELSE CONCAT(' ', column_name, ' AS ', pascal_name, 'TXT')
END AS c
FROM base
ORDER BY ordinal_position;

```

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