



WINDOW-FUNCTION TAB

Expression

Build a custom computed column from an expression combining columns, constants, operators, and functions.

Who

WHO IT IS FOR

Anyone who needs a calculated column the standard tabs don't provide.

What

WHAT IT DOES

The Expression tab lets you write a formula such as @0 * @1 / @2, then map each @N placeholder to a column. Give the result an alias and it becomes an output column. A Simple mode wraps a single column in one function; free-form mode allows full expressions.

When

WHEN TO USE IT

Use it for derived values — net price, ratios, CASE logic, string concatenation — that combine columns and constants.

Where

WHERE TO FIND IT

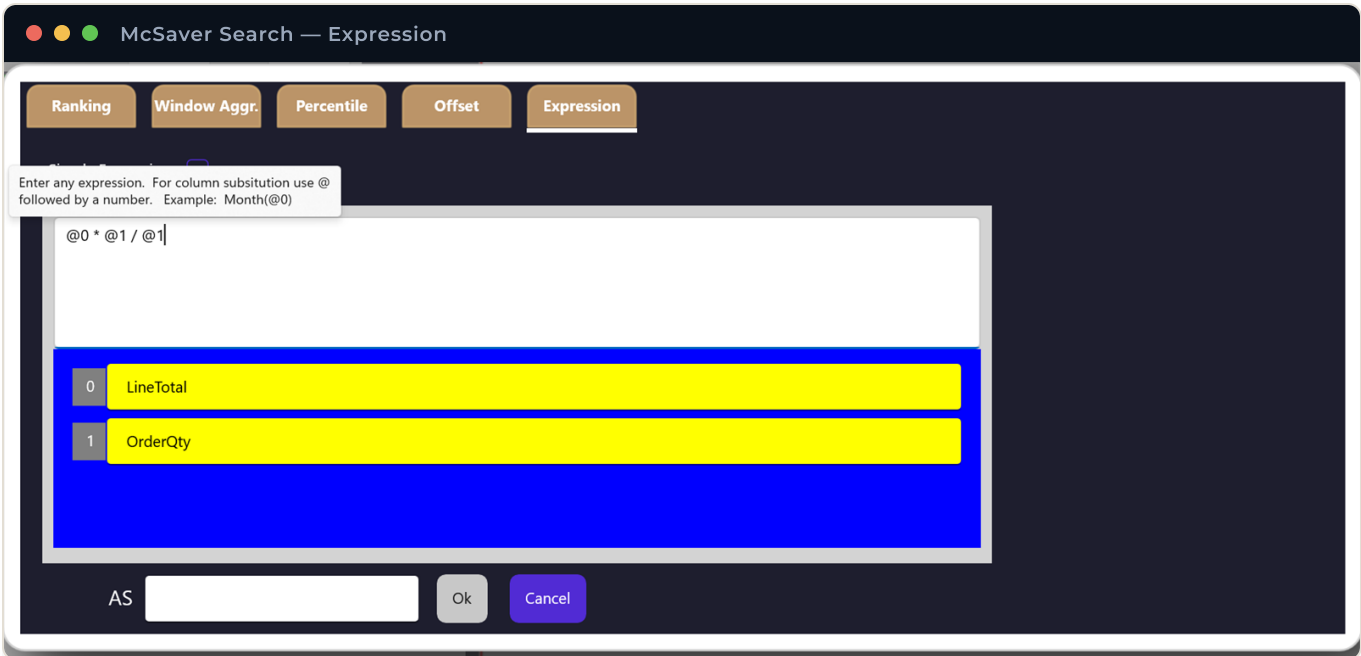
Open the advanced column popup from the dictionary icon on a selected column in the Searcher's Select tab; choose the Expression tab. Map each @N to a column, set the AS alias, and click Ok.

Why

WHY IT MATTERS

Calculated columns keep business logic in the query rather than in downstream spreadsheets, and the placeholder mapping keeps multi-column formulas readable and correct.

SCREENSHOT



The Expression tab: the formula @0 * @1 / @2 with @0 mapped to LineTotal and @1 to OrderQty.



Tip of the Day 88 tips

These Searcher Tip of the Day entries apply across all of its sub-tabs — open them in the app from the lightbulb icon in the Searcher header.

- VALUE** Build complex SQL queries visually without writing a single line of code — pick tables, columns, filters, grouping, and sorting through the tabs and let the Searcher generate the SQL for you.
- OVERVIEW** The Searcher is a visual SQL query builder where you choose a root table and assemble a SELECT statement using the Select, Where, Group By, Having, Order By, SQL, and Tree tabs.
- NAVIGATION** Use the root-entity Picker beside the "Searcher" title to choose the table your query is built from; its tooltip shows the table's description.
- FEATURE** The name of the saved search you load — or one you just saved — shows next to the title, with an unsaved-changes indicator you can click to overwrite the saved copy.
- FEATURE** Check "Ex-Right" in the header to eliminate every column that sits to the right of the root entity in the join tree.
- PERFORMANCE** Set the "Timeout" value in the header to cap how many seconds an SQL operation may run before it is cancelled.
- ACTION** Click "Show Results" in the header to run the query and open the results in a separate Search Results window.
- WORKFLOW** Click the save (disk) icon in the header to open the Save SQL dialog and persist your query.
- WORKFLOW** Click the list icon in the header to load a previously saved Searcher criteria back into the builder.

WORKFLOW	In the manage-criteria dialog you can delete saved criteria one at a time; each delete asks you to confirm and warns that any charts saved under that criteria will be deleted along with it.
VISUAL	Click the camera icon in the header to save images of the current view when image capture is available.
ACTION	Single-tap the camera icon to capture the full Searcher window plus the currently visible tab; double-tap it to capture the window and then cycle through every tab, saving a separate screenshot of each one.
NAVIGATION	Click the tip (lightbulb) icon in the header to reopen this Tip of the Day window.
NAVIGATION	On the Tree tab, type in the "Hightlite Items" entry to highlight matching entities in yellow across the join tree.
VISUAL	Use the "Show Short Aliases" toggle in the tab bar (visible on every sub-tab) to switch entity names between their full aliases and abbreviated short aliases; it starts unchecked.
VISUAL	On the Tree tab, green depth bars mark the Left Side of the tree and blue depth bars mark the Right Side, with a Level pill showing each join's depth.
NAVIGATION	Click any entity row in the Tree tab to re-root your query on that table without leaving the Tree tab.
ACTION	Right-click an entity in the Tree tab to set a custom alias for that table.
VISUAL	Each Tree row shows a join-type pill whose letter (and tooltip) tells you the kind of join used to reach that entity.
NAVIGATION	Use the "Last Viewed" bar at the bottom of the Tree tab to jump back to any of your recently viewed root entities.
ACTION	Click the All/Alt/Group pill on the Select tab to cycle the left list between every column, unique column names, and a grouped view.
ACTION	On the Select tab, check "Distinct" to return only unique rows in your results.
PERFORMANCE	Check "No lock" on the Select tab to add a NOLOCK hint that reads without taking locks on a busy database.
ACTION	Use "Skip" and "Top" on the Select tab to page through or cap result size — great for previewing large tables quickly.
FILTER	Type in the "Filter value" entry on the Select tab to narrow the list of selectable columns by name.
ACTION	Tap a column in the left list of the Select tab to add it to your query; double-tap a selected column on the right to remove it.
ACTION	Right-click the "X of" count on the Select tab to add all filtered columns, or right-click the total count to add every column at once.
SELECTION	Right-click the selected-columns count on the Select tab to remove all selected columns in one step.
VISUAL	Red row-count bars warn that a table has over a million rows and yellow bars warn of over a hundred thousand rows — add WHERE filters before querying those.

COLUMN	In the column lists, a blue "R" means the column exists in the root table, a green "1" marks a one-to-one relationship, a red "M" marks one-to-many, and an orange flag marks a natural key.
ACTION	Click the small green key icon on an ID or foreign-key column in the Select, Order By, or Group By column lists to instantly add the referenced table's natural key — its human-readable column (e.g. a name) — instead of the raw Id.
ACTION	Click the ► expander beside a foreign-key column to open the table it points to and add any of that table's columns through the join, without re-rooting your query.
FEATURE	The foreign-key expander works even when the referenced table has no natural key of its own, and nested foreign keys expand further — so you can drill from table to table to any depth to reach the column you want.
ACTION	Click the rotated aggregation icon next to a selected column to change its aggregation (Sum, Count, Avg, Min, Max, and more).
ACTION	Right-click a selected column on the Select tab to rename its output alias in the results.
ACTION	Right-click a selected column on the Select tab and choose "Paths" to view every join route that connects that column back to the root entity through the foreign-key tree.
ACTION	Drag and drop selected columns on the Select tab to reorder them in the query output.
FILTER	Check "Exclude Nulls" on a selected column to filter out null values from nullable or left-joined columns.
FEATURE	Click the dictionary icon on a selected column to open the advanced popup for Ranking, Window, Percentile, Offset, and Expression support.
VISUAL	On a selected column, a blue bar marks a required left join, a red bar marks a one-to-many path, and a green bar marks a nullable column.
ACTION	On the Where tab, click the add (+) icon to append a new filter condition to your query.
ACTION	Use the And/Or connector Picker on each Where row to control how that condition joins the previous one.
ACTION	Drag the colored group bars on the left of a Where row to wrap conditions in parentheses or ungroup them.
VISUAL	Aqua group bars on the Where tab mean your parenthetical grouping is valid; red bars mean a group still needs fixing.
ACTION	Double-tap the funnel icon on a Where row to delete that condition.
ACTION	Click the tag / data-connection icon on a Where row to switch between comparing against a typed value and comparing against another column.
FEATURE	The Where value editor adapts to the column type, offering text, numeric, date, time, or a dropdown of known reference values.
FILTER	On a nullable or left-joined Where column, toggle the include-nulls radio button to include null rows; right-click it to turn that off.

FILTER	When a Where or Having condition compares a date or datetime column with a single-value operator, a "When" toggle appears beside Value and Column — pick it to filter by a relative date such as Today, This Month, or This Year instead of typing a literal date.
FILTER	In the "When" relative-date editor, choose a token (Today, ThisMonth, ThisYear, Now, and more) plus an optional offset in that token's own unit — days for Today, months for This Month, years for This Year — where -1 means the previous one; a hint shows the date it resolves to now, and it re-resolves each time the query runs.
CLARIFICATION	The Having tab works just like the Where tab but filters after aggregation — it appears only when your query uses GROUP BY.
CLARIFICATION	The Group By and Having tabs appear automatically once an aggregation forces a GROUP BY, and hide again when none is needed.
ACTION	On the Order By tab, click the arrow icon next to a sort column to toggle between Ascending and Descending.
ACTION	Check "Best Guess" on the Order By tab to auto-suggest a reasonable sort order for your query.
FILTER	Check "Limit to used columns" on the Order By or Group By tab to show only columns already used in your query.
ACTION	Drag and drop Order By columns to set sort priority — the topmost column sorts first; double-tap a column to remove it.
ACTION	Click "Clear all" on the Order By or Group By tab to remove every selected sort or grouping column at once.
ACTION	On the Group By tab, check "Best Guess" to auto-suggest grouping columns based on your selected columns.
NAVIGATION	The SQL tab shows a read-only, syntax-highlighted preview of the generated query with line numbers.
CLIPBOARD	When the query can't build, click the red error banner at the bottom of the SQL tab to copy the message to your clipboard.
FEATURE	In the advanced popup, the Ranking tab builds ROW_NUMBER, RANK, and DENSE_RANK functions with optional PARTITION BY and ORDER BY columns.
FEATURE	The Window Aggr. tab computes an aggregate OVER a window, with optional ORDER BY and a Frame clause using ROWS BETWEEN preceding and following bounds.
FEATURE	The Percentile tab calculates distribution percentiles from 0.0 to 1.0 within an ordered group, with optional PARTITION BY columns.
FEATURE	The Offset tab builds LAG and LEAD functions, letting you set the offset, a default value, and null handling to compare a row to its neighbors.
FEATURE	The Expression tab lets you write a free-form expression and map @0, @1, @2 placeholders to columns you pick below.
ACTION	Check "Simple Expression" in the Expression tab for guided DateTime, String, or Math function pickers chosen by the column's data type.

VISUAL	In the advanced popup, give your new column a name in the "AS" entry, then click Ok to add it or Cancel to discard it.
WORKFLOW	In the Save SQL dialog, choose a Format of Criteria, SQL, View, Proc, or Func to control what gets generated.
WORKFLOW	Save as Criteria to preserve the full visual query structure so you can reload and edit it later.
EXPORT	In the Save SQL dialog, pick a Destination of File, Database, or Clipboard for the generated SQL.
WORKFLOW	Saving to the Database creates or replaces a real SQL object, so each such save is recorded in the host SQL change log where you can review it later.
TECHNIQUE	Check "Generate Test Script" when saving to also place a runnable test version of your query on the clipboard.
ACTION	When saving to a file, check "Open Directory" to reveal the saved file's folder once the save completes.
WORKFLOW	Click the feedback icon (top-right, visible when registered) to open the Send Feedback popup — describe a bug, request an enhancement, paste screenshots, and optionally include your database schema for context.
FEATURE	In the feedback popup, choose a category (Bug, Enhancement, or Other), type your comment, and paste one or more screenshots from the clipboard to illustrate the issue.
FEATURE	Check "Include database schema" in the feedback popup to attach your DDL with the message — a confirmation dialog warns this may take a minute for large databases.
FEATURE	"Send me a copy" is checked by default in the feedback popup, so you receive a copy of your message at the email address you enter.
ACTION	On the Where and Having tabs, tap the Field cell to open a searchable column browser — pick from unique column names, expand a name (►) to choose a specific join path, and read its R/I/M/N flags.
ACTION	When a Where or Having condition compares against another column, tap the column cell to choose it from that same searchable browser popup.
FEATURE	In the advanced popup, the PARTITION BY and ORDER BY add buttons — and the Expression tab's @0/@1/@2 parameter slots — open the same searchable column browser to pick each column.
VISUAL	On the Ranking, Window Aggr., and Offset tabs, a live count beside the + button shows how many PARTITION BY and ORDER BY columns you have chosen.
ACTION	On the Select tab, a plain click on a multi-path column adds the copy from your root table when the column lives there; click the ►/▼ arrow beside its name to expand every reachable column that shares that name, listed fewest-join-links first.
FEATURE	Expanding a multi-path column on the Select tab gives each join-path variant its own row — showing that path's link count, a hover tooltip with the full join route, its own green key icon, and its own ► drill-in expander — so you can add, swap to a natural key, or drill deeper along that exact path.

- ACTION** Right-click a multi-path column on the Select tab to open the join-paths popup, where paths are sorted shortest first and the hops that differ from the row above are highlighted; click a path to add that column, or click its key icon to add that path's natural key.
- FEATURE** When a column's referenced table has a multi-part (composite) natural key, clicking its green key icon adds one free-form expression that concatenates the key's columns separated by " | " — and any part that is itself a foreign key is replaced with its own natural key.
- NAVIGATION** On the Tree tab, click the ► expander on an entity row to reveal or hide the tables connected deeper beneath it, so you can collapse whole branches of a large join tree and focus on the part you care about.
- FEATURE** Set your preferred Searcher defaults — Show Short Aliases, the Select tab's Distinct / No lock / Top, the Where and Having Visual-vs-Advanced mode, the Order By and Group By "Limit to used columns" and "Best Guess" options, and the Rating toggles — from the App Default Preferences panel in your account's Edit Profile dialog; new Searcher windows and tabs open with those values.
- TECHNIQUE** Launch McSaverSearch with the --copy-pref-path switch to copy your preferences file's location to the clipboard, or --delete-prefs to delete the file and reset your saved defaults.