



# Tips to Avoid Problems in Beast Mode

## Tip #1: Filtering

### Problem:

If you want to filter based on the values from more than one column at the same time, especially when using OR and AND conditions.

### Resolution:

Use any combination of AND logic, OR logic, comparisons, or mathematical expressions. For example, let's say you want to see only the opportunities closed within 30 days. To do this, create a Beast Mode with the following code:

```
CASE
  WHEN `OpportunityStatus` = 'Closed' AND `DaysToClose` <= 30
  THEN 'YES'
  ELSE 'NO'
END
```

## Tip #2: Sorting

### Problem:

You want to sort a text column by importance, or chronologically (ie. Month names Jan-Dec), but the sort feature is sorting it alphabetically.

### Resolution:

Text columns naturally sort alphabetically, therefore, to sort it in a non-alphabetical way (ie. January - December) you need to assign a numeric value to each text value via a Beast Mode calculation. This allows you to then sort numerically, ascending or descending, in the order of desired importance. To write this type of Beast Mode, you would use a logical Case Statement to assign a number to a corresponding text value.

Here is an example Beast Mode needed to sort January - December:



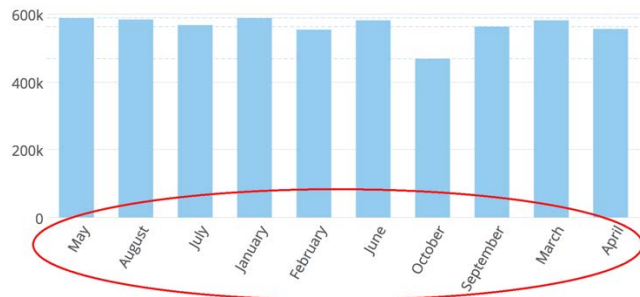
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CASE

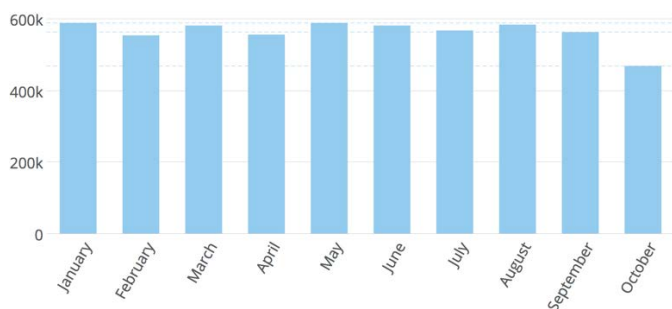
```
WHEN `MonthName` = 'January' THEN 1
WHEN `MonthName` = 'February' THEN 2
WHEN `MonthName` = 'March' THEN 3
WHEN `MonthName` = 'April' THEN 4
WHEN `MonthName` = 'May' THEN 5
WHEN `MonthName` = 'June' THEN 6
WHEN `MonthName` = 'July' THEN 7
WHEN `MonthName` = 'August' THEN 8
WHEN `MonthName` = 'September' THEN 9
WHEN `MonthName` = 'October' THEN 10
WHEN `MonthName` = 'November' THEN 11
WHEN `MonthName` = 'December' THEN 12
```

END

Here's how the chart looked before the resolution:



And here is how the chart should look after the resolution has been applied:



## Tip #3: External Links

### Problem:

You would like to include links to external webpages inside cells of a Table Card.

### Resolution:

Create a Beast Mode with code like this if you know the URL (e.g., <https://CRM.com/>) and want to open a specific webpage or opportunity id at that website:



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```
CONCAT('<a href= https://CRM.com/', `Id`, ' target = new> Go to Opportunity </a>')
```

Or if your URL is a field in the dataset, create a Beast Mode with code like this:

```
CONCAT('<a href="', `URL`, '">This is a link</a>')
```

...where `URL` is a field that contains the fully qualified URL to the site to which you would like to link, e.g. <https://dojo.domo.com>.

## Tip #4: NULLIF and IFNULL

### Problem:

Your Beast Mode won't display, there may be a divide by zero error that can be fixed with NULLIF. Separately, you may want to replace null values with text (which can be accomplished using IFNULL).

### Resolution:

NULLIF is used to return null if the expression has a specific value, whereas IFNULL is used to return text if the expression is null.

NULLIF. NULLIF returns null if the value in the first column equals the value in the second column; otherwise returns the value in the first column. As a best practice, use NULLIF anytime you are doing division or ratios in a beast mode to avoid divide-by-zero errors and want to replace zeros with null values. Type NULLIF( at the start of the denominator and type ,0) at the end. This will replace zero totals with blank (null) values and allow cards to render properly.

IFNULL. Use IFNULL to substitute a null value with a different value, for example replace nulls with the word "unknown."

## Tip #5: Blank records—can't drill

### Problem:

If a field that you want to use as a series contains null values, the records with the null values will not appear in the drill path. In other words, you cannot drill on null values.

### Resolution:

Create a Beast Mode that contains IFNULL() logic to replace null values with a new value, e.g. 'blank' or 'no value'. Replace the series field with this new Beast Mode field.



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## Tip #6: IN

### Problem:

In CASE statements with multiple WHEN clauses, you may create unnecessarily long Beast Modes. These can be greatly shortened by consolidating multiple WHEN clauses or parameters.

For example:

```
CASE
  WHEN `StageName` = 'Closed - Won'
  THEN 'Closed'
  WHEN `StageName` = 'Closed - Lost'
  THEN 'Closed'
END
```

### Resolution:

Use the IN function to include all required parameters in a single line.

For example:

```
CASE
  WHEN `StageName` IN ('Closed - Won', 'Closed - Lost')
  THEN 'Closed'
END
```

## Tip #7: LIKE

### Problem:

You may need to match only part of a value, instead of a complete match of the full value.

### Resolution:

The LIKE operator lets you search for a specified pattern in a column. You can use these wildcards with the LIKE operator:

- % to match any number of characters, even zero characters.
  - like '%TX%'
- \_ to match exactly one character.
  - like '\_hn%'

For example, if you wanted to see if a StageName value contains the word "Closed" in it, you could use the expression:

```
StageName LIKE '%Closed%'
```



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Similarly, you could check for a StageName ending in "Closed" with:

```
StageName LIKE '%Closed'
```

Notice the wildcard before the word "Closed". This instructs Domo that it doesn't matter what comes before it, as long as the value ends with the word "Closed."

The "\_" wildcard is used to mask, or ignore, a single character in a value. For example, if you want to find whether a value matches the format "Value X is here", where "X" could be any character, you could use the expression:

```
ValueField LIKE 'Value _ is here'
```

## Tip #8: SUBSTRING

### Problem:

You are unsure how to differentiate between starting from the beginning or end of string value to pull out needed substring.

### Resolution:

If you wish to start from the beginning of the string value and move inwards, similar to a LEFT function in Excel, a "1" would be used. If starting from the end is desired, similar to the RIGHT function in Excel, a "-1" is used.

Here is an example, starting from beginning of string value and pulling 5 characters:

```
SUBSTRING(`StageName`,1,5)
```