Table manipulation functions

INTERMEDIATE DAX IN POWER BI

Maarten Van den Broeck
Content Developer at DataCamp

Table manipulation functions overview

Previously seen functions

```
DISTINCT(<table> | <table>)
```

Removes duplicate rows from a table or values from a column

```
SELECTCOLUMNS(<table>, <name>, <expression>)
```

Returns the selected columns from another table as a new table

New functions

```
ADDCOLUMNS(<table>, <name>, <expression>)
```

Returns the input table appended with the selected columns from another table

```
SUMMARIZE(<table>,
          <groupBy_columnName>,
          <name>,
          <expression>)
```

Returns a summary table for the requested totals over a set of groups

ADDCOLUMNS()

ADDCOLUMNS(<table>, <name>, <expression>)

Returns the input table appended with the selected columns from another table

```
ADDCOLUMNS(Fact_table,
           "Profit",
           Revenue - Costs)
```

ADDCOLUMNS()

ADDCOLUMNS(<table>, <name>, <expression>)

Returns the input table appended with the selected columns from another table

```
ADDCOLUMNS(Fact_table,
            "Profit",
            Revenue - Costs)
```

Revenue	Costs	Profit
100	25	**75**
150	25	**125**

ADDCOLUMNS()

ADDCOLUMNS(<table>, <name>, <expression>)

SELECTCOLUMNS(<table>, <name>, <expression>)

Returns the input table appended with the selected columns from another table

Returns the selected columns from another table as a new table

```
ADDCOLUMNS(Fact_table,
        "Profit",
        Revenue - Costs)
```

```
SELECTCOLUMNS(Fact_table,
            "Profit",
            Revenue - Costs)
```

Revenue	Costs	Profit
100	25	**75**
150	25	**125**

Profit
75
125

SUMMARIZE()

```
SUMMARIZE(<table>,

          <groupBy_columnName>,

          <name>,

          <expression>)
```

Returns a summary table for the requested totals over a set of groups

SUMMARIZE()

```
SUMMARIZE(<table>,

          <groupBy_columnName>,

          <name>,

          <expression>)
```

Returns a summary table for the requested totals over a set of groups

```
SUMMARIZE(Amounts,

          Amounts[Year],

          Amounts[Category],

          "Total Amount",

          SUM(Amounts[Amount]))
```

Year	Category	Amount
2019	Tickets	50
2019	Postcards	500
2020	Tickets	200
2020	Tickets	400

INTERMEDIATE DAX IN POWER BI

SUMMARIZE()

```
SUMMARIZE(<table>,
          <groupBy_columnName>,
          <name>,
          <expression>)
```

Returns a summary table for the requested totals over a set of groups

```
SUMMARIZE(Amounts,
          Amounts[Year],
          Amounts[Category],
          "Total Amount",
          SUM(Amounts[Amount]))
```

Year	Category	Amount
2019	Tickets	50
2019	Postcards	500
2020	Tickets	200
2020	Tickets	400

Year	Category	Total Amount
2019	Tickets	50
2019	Postcards	500
2020	Tickets	600

SUMMARIZE() best practices

- Created columns of `SUMMARIZE()` can give unexpected results based on context

```
SUMMARIZE(Amounts,
          Amounts[Year],
          Amounts[Category]),
          "Total Amount",
          SUM(Amounts[Amount])
```

- Best practice is to wrap `ADDCOLUMNS()` around `SUMMARIZE()` when creating new columns

```
ADDCOLUMNS(
    SUMMARIZE(Amounts,
              Amounts[Year],
              Amounts[Category]),
    "Total Amount",
    SUM(Amounts[Amount])
)
```

Let's practice!

INTERMEDIATE DAX IN POWER BI

Table manipulations using DAX

INTERMEDIATE DAX IN POWER BI

Maarten Van den Broeck
Content Developer at DataCamp

Let's practice!

INTERMEDIATE DAX IN POWER BI