```
--1 Wyliczyć udział wartości sprzedaży poszczególnych produktów w sprzedaży wszystkich produktów odpowiedniego dostawcy (Brand name).
with MEMBER
Measures.[parent Sales] as '(product, Measures. [Store sales])/(product.parent,Measures.[Store sales])', format = '00.00%'
SELECT
{ Measures.[parent Sales]} on columns,
{([Product].[product Name].MEMBERS)} on rows
from Sales
```

Messages | Results

	parent Sales
Good Imported Beer	49.88%
Good Light Beer	50.12%
Pearl Imported Beer	28.96%
Pearl Light Beer	71.04%
Portsmouth Imported Beer	37.85%
Portsmouth Light Beer	62.15%
Top Measure Imported Beer	46.50%
Top Measure Light Beer	53.50%
Walrus Imported Beer	48.49%
Walrus Light Beer	51.51%
Good Chablis Wine	20.83%
Good Chardonnay	20.48%
Good Chardonnay Wine	11.37%
Good Light Wine	05.53%
Good Merlot Wine	13.81%
Good White Zinfandel Wine	27.98%
Pearl Chablis Wine	35.19%
Pearl Chardonnay	20.66%
Pearl Chardonnay Wine	08.58%
Pearl Light Wine	07.09%
Pearl Merlot Wine	07.74%
Pearl White Zinfandel Wine	20.75%
Portsmouth Chablis Wine	09.72%
Portsmouth Chardonnay	17.36%
Portsmouth Chardonnay Wine	27.77%
Portsmouth Light Wine	14.95%
Portsmouth Merlot Wine	19.98%
Portsmouth White Zinfandel Wine	10.22%
Top Measure Chablis Wine	27.58%
Top Measure Chardonnay	21.20%
Top Measure Chardonnay Wine	04.19%
Top Measure Light Wine	32.34%
Top Measure Merlot Wine	08.43%
Top Measure White Zinfandel Wine	06.27%
Walrus Chablis Wine	18.70%

```
--2 Obok liczby dostarczonych sztuk produktów z bieżącego miesiąca (1. kolumna) pokazać średnią liczbę dostarczonych sztuk z 2 miesięcy poprzedzających (2. kolumna), np. obok danych marca ma być średnia stycznia i lutego itd.
with MEMBER
Measures.[prev months mean] as '((([Time].PrevMember, [Measures].[Units Shipped]) + ([Time].lag(2), [Measures].[Units Shipped]))/2)'
select
{[Measures].[Units Ordered], [Measures].[prev months mean]} on columns,
{[Time].[Month].MEMBERS} on rows
from Warehouse;
```

Messages | Results

	Units Ordered	prev months mean
1	24,398	(null)
2	15,765	11361
3	15,780	18382.5
4	18,940	14114.5
5	17,740	15711.5
6	17,314	16657
7	19,888	15975
8	18,112	17261.5
9	24,869	17475.5
10	20,367	19569.5
11	17,511	20615
12	16,554	17231.5
1	33,363	15703.5
2	32,888	23069
3	31,802	30194.5
4	35,225	29506
5	35,656	30931.5
6	34,064	32746.5
7	31,787	32020
8	31,276	30053.5
9	33,286	28779.5
10	35,361	29595.5
11	33,699	31240.5
12	31,221	31214.5

```
--3 Pokazać udziały procentowe wartości kosztów sprzedaży w miastach w stosunku do ich grup nadrzędnych  (stan/prowincja) w poszczególnych miesiącach. Ukryć wartości puste (null).
with MEMBER Measures.[q parent city ratio] AS 'IIF(ISNULL(([Time], [Store].Parent, [Measures].[Store Cost])), NULL, ([Time], [Store], [Measures].[Store Cost]) / ([Time], [Store].Parent, [Measures].[Store Cost]))', FORMAT_STRING = '00.00%'
SELECT
{[Measures].[q parent city ratio]} ON COLUMNS,
NON EMPTY {Crossjoin([Time].[Month].MEMBERS, [Store].[Store City].MEMBERS)} ON ROWS
FROM SALES;
```

100 %

Messages | Results

		q parent city ratio
1	Beverly Hills	22.30%
1	Los Angeles	35.68%
1	San Diego	40.23%
1	San Francisco	01.79%
1	Portland	30.96%
1	Salem	69.04%
1	Bellingham	01.88%
1	Bremerton	17.76%
1	Seattle	20.81%
1	Spokane	16.47%
1	Tacoma	31.21%
1	Walla Walla	01.45%
1	Yakima	10.43%
2	Beverly Hills	22.32%
2	Los Angeles	44.02%
2	San Diego	30.51%
2	San Francisco	03.14%
2	Portland	48.58%
2	Salem	51.42%
2	Bellingham	01.63%
2	Bremerton	20.84%
2	Seattle	19.02%
2	Spokane	21.13%
2	Tacoma	26.69%
2	Walla Walla	01.52%
2	Yakima	09.17%
3	Beverly Hills	23.16%
3	Los Angeles	34.01%
3	San Diego	40.07%
3	San Francisco	02.76%
3	Portland	30.93%
3	Salem	69.07%
3	Bellingham	01.64%
3	Bremerton	20.46%