

# Zad 1

```

with cte as (
SELECT
    sum([SalesAmount]) as amount,
    [OrderDate] as d
FROM [AdventureWorksDW2019].[dbo].[FactInternetSales]
group by [OrderDate])

select
amount,
avg(amount) over (order by d
rows between 3 preceding and current row)
,d as OrderDate
from cte
order by d

```

100 %

Results Messages

	amount	(No column name)	OrderDate
1	14477,3382	14477,3382	2010-12-29 00:00:00.000
2	13931,52	14204,4291	2010-12-30 00:00:00.000
3	15012,1782	14473,6788	2010-12-31 00:00:00.000
4	7156,54	12644,3941	2011-01-01 00:00:00.000
5	15012,1782	12778,1041	2011-01-02 00:00:00.000
6	14313,08	12873,4941	2011-01-03 00:00:00.000
7	7855,6382	11084,3591	2011-01-04 00:00:00.000
8	7855,6382	11259,1336	2011-01-05 00:00:00.000
9	20909,78	12733,5341	2011-01-06 00:00:00.000
10	10556,53	11794,3966	2011-01-07 00:00:00.000
11	14313,08	13408,757	2011-01-08 00:00:00.000
12	14134,80	14978,5475	2011-01-09 00:00:00.000
13	7156,54	11540,2375	2011-01-10 00:00:00.000
14	25047,89	15163,0775	2011-01-11 00:00:00.000
15	11230,6282	14392,4645	2011-01-12 00:00:00.000
16	14313,08	14437,0345	2011-01-13 00:00:00.000
17	14134,80	16181,5995	2011-01-14 00:00:00.000

## Zad 2

SQLQuery4.sql - (lo...90\Kierownik (52))\* SQLQuery3.sql - (lo...90\Kierownik (60))\* SQLQuery2.sql - (lo...90\Kierownik (67))\*

```

SELECT *
FROM
(
    SELECT
        [SalesTerritoryKey],
        MONTH([OrderDate]) as order_month,
        sum([SalesAmount]) as SalesAmount
    FROM [AdventureWorksDW2019].[dbo].[FactInternetSales]
    where YEAR([OrderDate]) = 2011
    group by
        MONTH([OrderDate]), [SalesTerritoryKey]
) AS SourceTable
PIVOT
(
    SUM([SalesAmount])
    FOR [SalesTerritoryKey] IN ([1], [2], [3], [4] , [5] , [6] , [7] , [8] , [9] , [10] )
) AS PivotTable;
  
```

100 %

Results Messages

	order_month	1	2	3	4	5	6	7	8	9	10
1	1	55186,5046	NULL	NULL	65628,7764	NULL	21965,4382	43930,8764	39182,69	207130,2928	36799,3364
2	2	43955,8764	NULL	NULL	90320,1064	NULL	25340,4282	11052,3482	37180,8964	204151,121	54334,1264
3	3	50235,0382	NULL	NULL	114065,301	NULL	17891,35	36977,6164	22168,7182	177393,5028	66467,1328
4	4	58968,0546	NULL	NULL	113837,021	NULL	11929,7264	10734,81	40174,3264	214593,3928	51836,5146
5	5	80819,2346	NULL	NULL	122638,7946	NULL	29846,0764	40377,6064	43396,0364	217636,8228	26966,9046
6	6	122638,7946	NULL	NULL	167422,0492	NULL	36278,5182	34098,4446	55682,3228	267232,2856	54487,4064
7	7	97393,8674	NULL	NULL	112210,5446	NULL	50413,3182	33246,0664	9075,5546	223109,1074	71298,0982
8	8	59959,691	NULL	NULL	63220,4228	NULL	164714,6782	33895,1646	51290,6964	190022,3274	51454,9546
9	9	67070,73	NULL	NULL	154417,9074	NULL	32001,15	38490,071	61123,1282	218157,641	31822,87
10	10	86716,8364	NULL	NULL	192094,622	NULL	71362,12	40759,1664	53869,7874	228029,331	35376,14
11	11	84194,2246	NULL	NULL	173052,3492	NULL	43256,7782	55364,7846	52332,3328	215724,2874	36621,0564
12	12	119917,9089	NULL	NULL	162320,5167	NULL	66572,2164	31918,371	55023,6746	200552,1373	33126,6782

Query executed successfully. (local) (15.0 RTM)

## Zad 3

SQLQuery4.sql - (lo...90)\Kierownik (52))*			
SQLQuery5.sql - (lo...90)\Kierownik (64))*			
SQLQuery2.sql - (lo...90)\Kierownik (67))*			
<pre> select [OrganizationKey], [DepartmentGroupKey],sum([Amount]) from [AdventureWorksDW2019].[dbo].[FactFinance] group by rollup([OrganizationKey],DepartmentGroupKey) order by OrganizationKey; </pre>			
100 %			
Results Messages			
	OrganizationKey	DepartmentGroupKey	(No column name)
1	NULL	NULL	1358640412,7
2	3	1	3453530
3	3	2	3623615
4	3	6	23680792
5	3	7	103245409,4
6	3	NULL	134003346,4
7	4	1	3714323
8	4	2	3831339
9	4	6	26330122
10	4	7	105047104,8
11	4	NULL	138922888,8
12	5	1	2782452
13	5	2	4280402
14	5	6	28680910
15	5	7	113288317,6
16	5	NULL	149032081,6

Zad 4

```
select
[OrganizationKey], [DepartmentGroupKey], sum([Amount]) as amount
from [AdventureWorksDW2019].[dbo].[FactFinance]
group by cube([OrganizationKey], DepartmentGroupKey)
order by OrganizationKey;
```

100 %

Results

Messages

	OrganizationKey	DepartmentGroupKey	amount
1	NULL	1	21053924,61
2	NULL	5	870742,17
3	NULL	6	221314887,4
4	NULL	7	990993430,9
5	NULL	NULL	1358640412,7
6	NULL	2	38237453,45
7	NULL	3	84542533,92
8	NULL	4	1627440,25
9	3	NULL	134003346,4
10	3	7	103245409,4
11	3	6	23680792
12	3	2	3623615
13	3	1	3453530
14	4	1	3714323
15	4	2	3831339
16	4	6	26330122
17	4	7	105047104,8

Query executed successfully.

## Zad 5

```
SQLQuery7.sql - (10...90)\Kierownik (35)
SQLQuery4.sql - (10...90)\Kierownik (32)
SQLQuery2.sql - (10...90)\Kierownik (67)

with cte as (
    select
        [OrganizationKey],
        sum([Amount]) as Amount
    from [AdventureWorksDW2019].[dbo].[FactFinance]
    where year([Date]) = 2012
    group by [OrganizationKey]
)

select distinct do.[OrganizationKey], do.[OrganizationName], cte.Amount as TotalAmount,
PERCENT_RANK() over (order by Amount) as percentile
from cte
join [AdventureWorksDW2019].[dbo].[DimOrganization] do on do.OrganizationKey = cte.OrganizationKey
order by [OrganizationKey]
```

100 %

Results Messages

	OrganizationKey	OrganizationName	TotalAmount	percentile
1	3	Northeast Division	57591781,4	0,625
2	4	Northwest Division	38434641,2	0,375
3	5	Central Division	52938481,4	0,5
4	6	Southeast Division	92428276,6	0,875
5	7	Southwest Division	87276465,2	0,75
6	8	Canadian Division	107976739,14	1
7	11	France	21786845,65	0,25
8	12	Germany	4288252,409999999	0,125
9	13	Australia	1392505,88	0

## Zad 6

```

with cte as (
    select
        [OrganizationKey],
        sum([Amount]) as Amount
    from [AdventureWorksDW2019].[dbo].[FactFinance]
    where year([Date]) = 2012
    group by [OrganizationKey]
)

select distinct do.[OrganizationKey], do.[OrganizationName], cte.Amount as TotalAmount,
PERCENT_RANK() over (order by Amount) as percentile,
STDEV([Amount]) over (order by [Amount]) as std_dev
from cte
join [AdventureWorksDW2019].[dbo].[DimOrganization] do on do.OrganizationKey = cte.OrganizationKey
order by [OrganizationKey]

```

100 %

Results Messages

	OrganizationKey	OrganizationName	TotalAmount	percentile	std_dev
1	3	Northeast Division	57591781,4	0,625	24097472,5798006
2	4	Northwest Division	38434641,2	0,375	17189531,6038978
3	5	Central Division	52938481,4	0,5	22079830,3035514
4	6	Southeast Division	92428276,6	0,875	34635783,8868116
5	7	Southwest Division	87276465,2	0,75	31021664,8937598
6	8	Canadian Division	107976739,14	1	38692899,4026427
7	11	France	21786845,65	0,25	11034153,1014632
8	12	Germany	4288252,40999999	0,125	2047602,00796041
9	13	Australia	1392505,88	0	NULL