

19 – Pivot

pivot will take a field's values and rotate them across the columns and thereby create a new output

Pivot the row data into a tabular output

	orderYear	productCategory	quantity
1	2018	Bakery	367,259
2	2018	Clinic	370,994
3	2018	Electronics	367,837
4	2018	Indoor	365,212
5	2018	Non Perishables	363,193
6	2018	Outdoor	368,191
7	2018	Over the Counter	367,604
8	2018	Pharmacy	367,302
9	2018	Produce	367,965
10	2018	Vision	370,173
11	2019	Bakery	252,234
...



	orderYear	Bakery	Clinic	Electronics	Indoor	Non Perishables	Outdoor	Over the Counter	Pharmacy	Produce	Vision
1	2021	98,329	98,381	98,303	96,776	97,310	96,652	96,498	96,622	97,400	97,591
2	2020	164,063	162,383	162,551	163,891	164,184	163,547	167,151	163,413	163,519	165,200
3	2019	252,234	249,468	253,488	251,630	251,255	252,729	249,727	248,836	253,041	252,979
4	2018	367,259	370,994	367,837	365,212	363,193	368,191	367,604	367,302	367,965	370,173

```
select
    year(od.orderDate) orderYear
    , od.productCategory
    , sum(od.productQuantity) quantity
from orderDetail od
group by
    year(od.orderDate)
    , od.productCategory
order by
    year(od.orderDate)
    , od.productCategory
;
```

sum quantity for category in list

aggregate

pivot field

```
select pvt.*
from (
    select
        year(od.orderDate) orderYear
        , od.productCategory
        , od.productQuantity
    from orderDetail od
) a
pivot(
    sum(productQuantity)
    for productCategory in([Bakery], [Clinic], [Electronics]
        , [Indoor], [Non Perishables], [Outdoor]
        , [Over the Counter], [Pharmacy]
        , [Produce], [Vision])
) pvt
order by pvt.orderYear desc
;
```

pivot field values for table