

```
/*
```

Write a query to return a result set which includes:

- revenue by year of each product line.
- revenue of each product line (of all years).
- revenue of all product lines (of all years).

```
*/
```

```
WITH productLineRevenue AS (  
    SELECT  
        p.productLine,  
        YEAR(o.orderDate) AS orderYear,  
        SUM(d.quantityOrdered * d.priceEach) AS revenue,  
        GROUPING(p.productLine) AS all_productLines,  
        GROUPING(YEAR(o.orderDate)) AS all_years  
    FROM  
        products AS p  
    INNER JOIN  
        orderdetails AS d  
        USING(productCode)  
    INNER JOIN  
        orders AS o  
        USING(orderNumber)  
    GROUP BY  
        p.productLine,  
        YEAR(o.orderDate)  
    WITH ROLLUP  
)  
SELECT  
    IF(all_productLines, "_TOTAL_", productLine) AS productLine,  
    CASE  
        WHEN all_years AND all_productLines THEN ""  
        WHEN all_years THEN "_all_years_"  
        ELSE orderYear  
    END AS orderYear,  
    revenue  
FROM  
    productLineRevenue;
```

## Result Grid

productLine	orderYear	revenue
Classic Cars	2003	1374832.22
Classic Cars	2004	1763136.73
Classic Cars	2005	715953.54
Classic Cars	_all_years_	3853922.49
Motorcycles	2003	348909.24
Motorcycles	2004	527243.84
Motorcycles	2005	245273.04
Motorcycles	_all_years_	1121426.12
Planes	2003	309784.2
Planes	2004	471971.46
Planes	2005	172881.88
Planes	_all_years_	954637.54
Ships	2003	222182.08
Ships	2004	337326.1
Ships	2005	104490.16
Ships	_all_years_	663998.34
Trains	2003	65822.05
Trains	2004	96285.53
Trains	2005	26425.34
Trains	_all_years_	188532.92
Trucks and Buses	2003	376657.12
Trucks and Buses	2004	465390
Trucks and Buses	2005	182066.45
Trucks and Buses	_all_years_	1024113.57
Vintage Cars	2003	619161.48
Vintage Cars	2004	854551.85
Vintage Cars	2005	323846.3
Vintage Cars	_all_years_	1797559.63
_TOTAL_		9604190.61