

```
SELECT *  
  
FROM sales  
  
ORDER BY store;
```

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ORDER BY store;
```

```
/* What were the yearly sales?*/  
  
SELECT date_part('year', date) AS year, ROUND(SUM(weekly_sales)/1000000000,2) AS yearly_sales_per_trillion  
  
FROM sales  
  
GROUP BY year;
```

```
/*What were the yearly sales by store?*/  
  
SELECT date_part('year', date) AS year, store, CAST(SUM(weekly_sales) AS money) AS yearly_sales  
  
FROM sales  
  
GROUP BY year, store  
  
ORDER BY year, store;
```

```
/*The previous query does not do a good job of letting us compare how each store did year to year so we'll filter  
them in the select clause by year to give us each year in it's own column*/
```

```

SELECT
    store,
    CAST(SUM(weekly_sales) filter(where date >= date '2010-01-01' AND date <= date '2010-12-31') AS money) AS yearly_sales_2010,
    CAST(SUM(weekly_sales) filter(where date >= date '2011-01-01' AND date <= date '2011-12-31') AS money) AS yearly_sales_2011,
    CAST(SUM(weekly_sales) filter(where date >= date '2012-01-01' AND date <= date '2012-12-31') AS money) AS yearly_sales_2012
FROM sales
GROUP BY store;

```

/*What is the YOY growth for each store?*/

```

SELECT
    store,
    ROUND((yearly_sales_2011 - yearly_sales_2010) / yearly_sales_2010 *100,2) AS "2011_sales_growth",
    ROUND((yearly_sales_2012 - yearly_sales_2011) / yearly_sales_2011 *100,2) AS "2012_sales_growth"
FROM
    (SELECT
        store,
        SUM(weekly_sales) filter(where date >= date '2010-01-01' AND date <= date '2010-12-31') AS yearly_sales_2010,
        SUM(weekly_sales) filter(where date >= date '2011-01-01' AND date <= date '2011-12-31') AS yearly_sales_2011,
        SUM(weekly_sales) filter(where date >= date '2012-01-01' AND date <= date '2012-12-31') AS yearly_sales_2012
    FROM sales
    GROUP BY store) AS sq

```

GROUP BY 1,2,3;

/* 2012 was our lowest year in total sales. What were the top 10 stores in total sales for 2012?*/

```
SELECT date_part('year', date) AS year, store, CAST(SUM(weekly_sales) AS money) AS yearly_sales
FROM sales
WHERE date_part('year', date) = 2012
GROUP BY year, store
ORDER BY yearly_sales DESC
LIMIT 10;
```

/* What were the bottom 10 stores in total sales for 2012?*/

```
SELECT date_part('year', date) AS year, store, CAST(SUM(weekly_sales) AS money) AS yearly_sales
FROM sales
WHERE date_part('year', date) = 2012
GROUP BY year, store
ORDER BY yearly_sales ASC
LIMIT 10;
```

/* Lets look at some store details*/

```
SELECT date_part('year', date) AS year, sales.store, type, size, CAST(SUM(weekly_sales) AS money) AS yearly_sales
```

```
FROM sales
```

```
INNER JOIN stores ON sales.store = stores.store
```

```
WHERE date_part('year', date) = 2012
```

```
GROUP BY year, sales.store, type, size
```

```
ORDER BY yearly_sales ASC
```

```
LIMIT 10;
```

```
/*Adding the metric to get sales by sqft will show us how well the store type is doing regardless of size*/
```

```
SELECT
```

```
    date_part('year', sales.date) AS year,
```

```
    sales.store,
```

```
    stores.type,
```

```
    size,
```

```
    CAST(SUM(sales.weekly_sales) AS money) AS yearly_sales,
```

```
    CAST(SUM(sales.weekly_sales/stores.size) AS money) AS sales_by_sqft
```

```
FROM sales
```

```
INNER JOIN stores ON sales.store = stores.store
```

```
WHERE date_part('year', date) = 2012
```

```
GROUP BY year, sales.store, stores.size, type
```

```
ORDER BY sales.store ASC;
```

/*What is the avg sales per sqft by store type? As you can see, type A stores have the lowest avg. sales
by sqft for all 3 years.*/

```
SELECT
    year,
    type,
    CAST(AVG(sales_by_sqft) AS money)AS avg_sales_by_sqft
FROM
(SELECT
    date_part('year', sales.date) AS year,
    stores.type,
    sales.store,
    stores.size,
    SUM(sales.weekly_sales) AS total_sales,
    SUM(sales.weekly_sales)/ AVG(stores.size) AS sales_by_sqft
    FROM sales
    INNER JOIN stores ON sales.store = stores.store
    GROUP BY year, stores.type, sales.store, stores.size) AS sq
GROUP BY 1,2
ORDER BY 1,3 DESC;
```

/*What were the yearly sales by department?*/

```
SELECT date_part('year', date) AS year, dept, CAST(SUM(weekly_sales) AS money) AS yearly_sales  
FROM sales  
GROUP BY year, dept  
ORDER BY year, dept;
```