

## 1. What is the regional sales in the best performing country?

- a. To find the best performing country, I need to find the country which has highest sales by using the table Sales.SalesTerritory. I aggregated revenue by sum 2 values SalesYTD and SalesLastYear

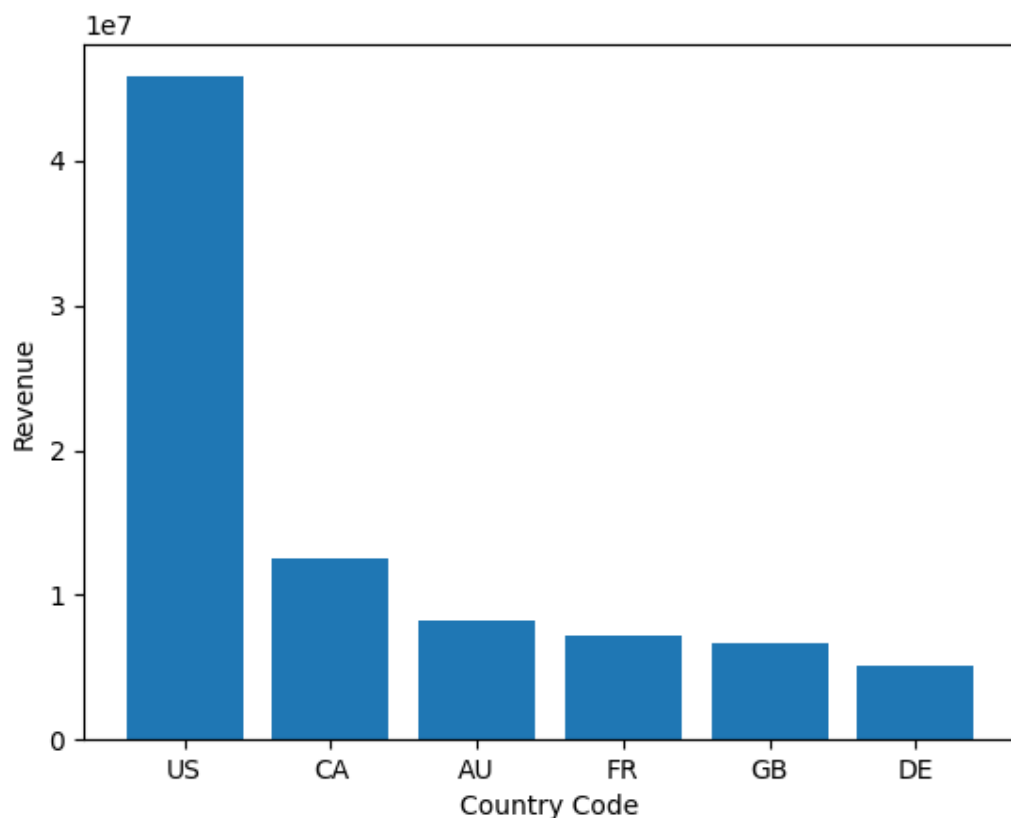
```
SELECT s.CountryRegionCode, SUM(s.SalesYTD + s.SalesLastYear) AS Revenue
FROM Sales.SalesTerritory AS s
GROUP BY s.CountryRegionCode
ORDER BY Revenue DESC;
```

Here is the result:

CountryRegionCode	Revenue
US	45813564.5284
CA	12465817.9976
AU	8256363.893
FR	7168938.0679
GB	6648728.7623
DE	5113152.1395

Then I choose the best performing country by select top 1 of that results, and that is United States.

This is the bar chart I created in python using table above.



- b. I use the query above as a CTE to join with the **SalesTerritory** table using **Country\_code** to find out what are the regional sale in the United State

```
WITH sales_per_country AS (
SELECT TOP 1 s.CountryRegionCode, SUM(s.SalesYTD + s.SalesLastYear) as Revenue
FROM Sales.SalesTerritory AS s
GROUP BY s.CountryRegionCode
ORDER BY Revenue DESC)

SELECT t.Name as Region,
       t.SalesYTD,
       t.SalesLastYear,
       s.CountryRegionCode
FROM Sales.SalesTerritory AS t
INNER JOIN sales_per_country AS s
ON t.CountryRegionCode = s.CountryRegionCode
ORDER BY t.SalesYTD DESC
```

And here is the result of the query, this is the answer for the question  
“What is the regional sales in the best performing country?”

Region	SalesYTD	SalesLastYear	CountryRegionCode
Southwest	10510853.8739	5366575.7098	US
Northwest	7887186.7882	3298694.4938	US
Central	3072175.118	3205014.0767	US
Southeast	2538667.2515	3925071.4318	US
Northeast	2402176.8476	3607148.9371	US

