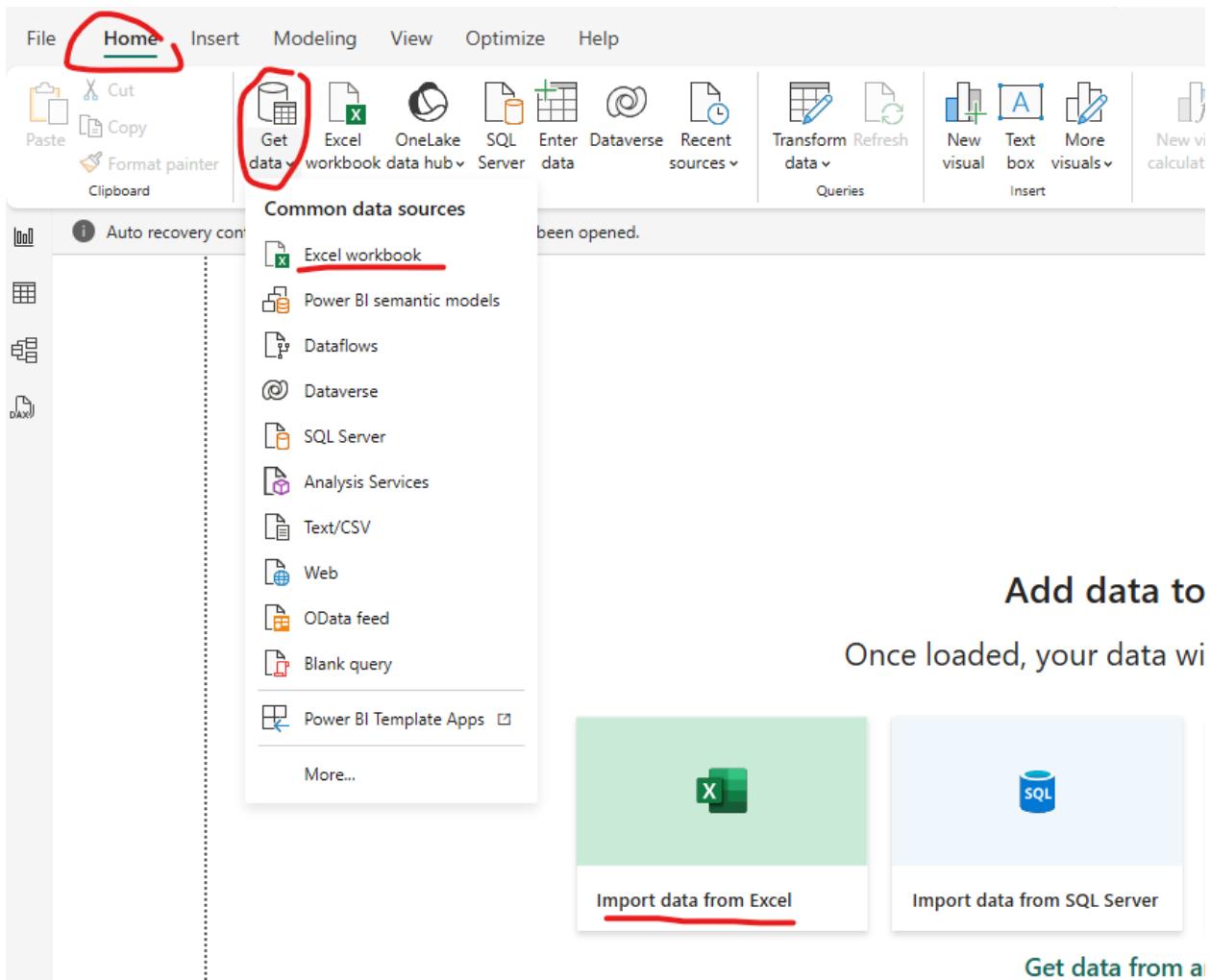


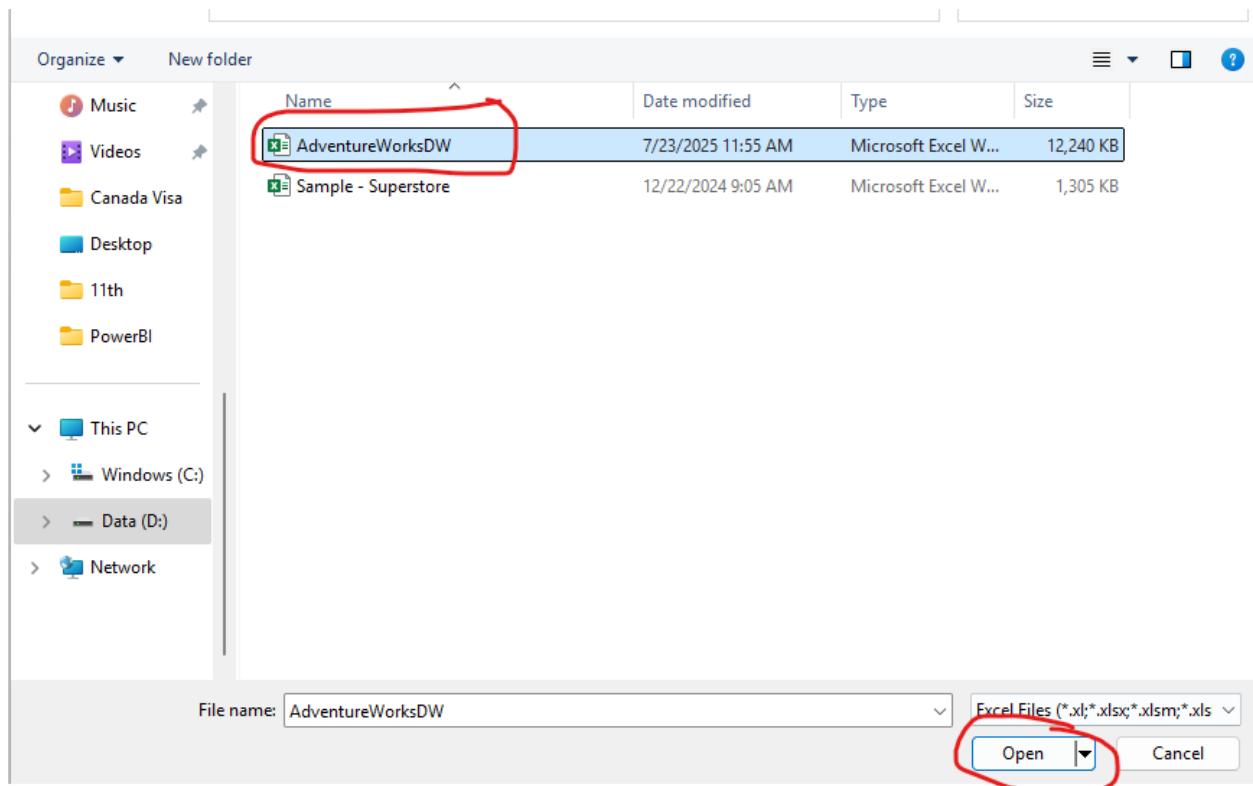
CASE STUDY - CREATING A REPORT IN POWER BI

The tasks to be completed:

1) Import AdventureWorksDW Database into Power BI Desktop.

Solution: Open Power Bi Desktop application on system and go to blank report.





2) Import FactInternetSales table and other related tables from AdventureWorks Database

The screenshot shows the Microsoft Data Import and Export Wizard interface. On the left, a tree view displays the 'AdventureWorksDW.XLSX [6]' file with several tables selected: DimCustomer, DimDate, DimGeography (which is highlighted with a gray background), DimProduct, DimSalesTerritory, and FactInternetSales. The main area shows the 'DimGeography' table with the following data:

GeographyKey	City	StateProvinceCode	StateProvinceName
1	Alexandria	NSW	New South Wales
2	Coffs Harbour	NSW	New South Wales
3	Darlinghurst	NSW	New South Wales
4	Goulburn	NSW	New South Wales
5	Lane Cove	NSW	New South Wales
6	Lavender Bay	NSW	New South Wales
7	Malabar	NSW	New South Wales
8	Matraville	NSW	New South Wales
9	Milsons Point	NSW	New South Wales
10	Newcastle	NSW	New South Wales
11	North Ryde	NSW	New South Wales
12	North Sydney	NSW	New South Wales
13	Port Macquarie	NSW	New South Wales
14	Rhodes	NSW	New South Wales
15	Silverwater	NSW	New South Wales
16	Springwood	NSW	New South Wales
17	St. Leonards	NSW	New South Wales
18	Sydney	NSW	New South Wales
19	Wollongong	NSW	New South Wales
20	Brisbane	QLD	Queensland
21	Caloundra	QLD	Queensland
22	East Brisbane	QLD	Queensland
23	Gold Coast	QLD	Queensland

At the bottom right, there are three buttons: 'Load' (highlighted with a red circle), 'Transform Data', and 'Cancel'.

Name

Mark as date table
Manage relationships
New measure
Quick New measure column
New table Calculations

Structure
Calendars
Relationships

Report view

	ProductKey	OrderDateKey	DueDateKey	ShipDateKey	CustomerKey	PromotionKey	CurrencyKey	SalesType
	528	20071229	20080110	20080105	11024	1	100	
	528	20070910	20070922	20070917	11049	1	100	
	528	20080623	20080705	20080630	11086	1	100	
	528	20070920	20071002	20070927	11140	1	100	
	528	20080510	20080522	20080517	11159	1	100	
	528	20080206	20080218	20080213	11163	1	100	
	528	20080206	20080218	20080213	11164	1	100	
	528	20080327	20080408	20080403	11169	1	100	
	528	20080504	20080516	20080511	11188	1	100	
	528	20080719	20080731	20080726	11190	1	100	
	528	20071107	20071119	20071114	11210	1	100	
	528	20080531	20080612	20080607	11222	1	100	
	528	20070809	20070821	20070816	11260	1	100	
	528	20071115	20071127	20071122	11273	1	100	
	528	20080128	20080209	20080204	11285	1	100	
	528	20080310	20080322	20080317	11306	1	100	
	528	20080626	20080708	20080703	11310	1	100	
	528	20080220	20080303	20080227	11320	1	100	
	528	20071008	20071020	20071015	11499	1	100	
	528	20071104	20071116	20071111	11504	1	100	
	528	20080229	20080312	20080307	11524	1	100	
	528	20080421	20080503	20080428	11638	1	100	
	528	20080604	20080616	20080611	11655	1	100	
	528	20071126	20071208	20071203	11657	1	100	
	528	20080108	20080120	20080115	11692	1	100	

Untitled - Power BI Desktop

File Home Help **Table tools**

Name DimSalesTerritory

Structure Calendars Relationships Calculations

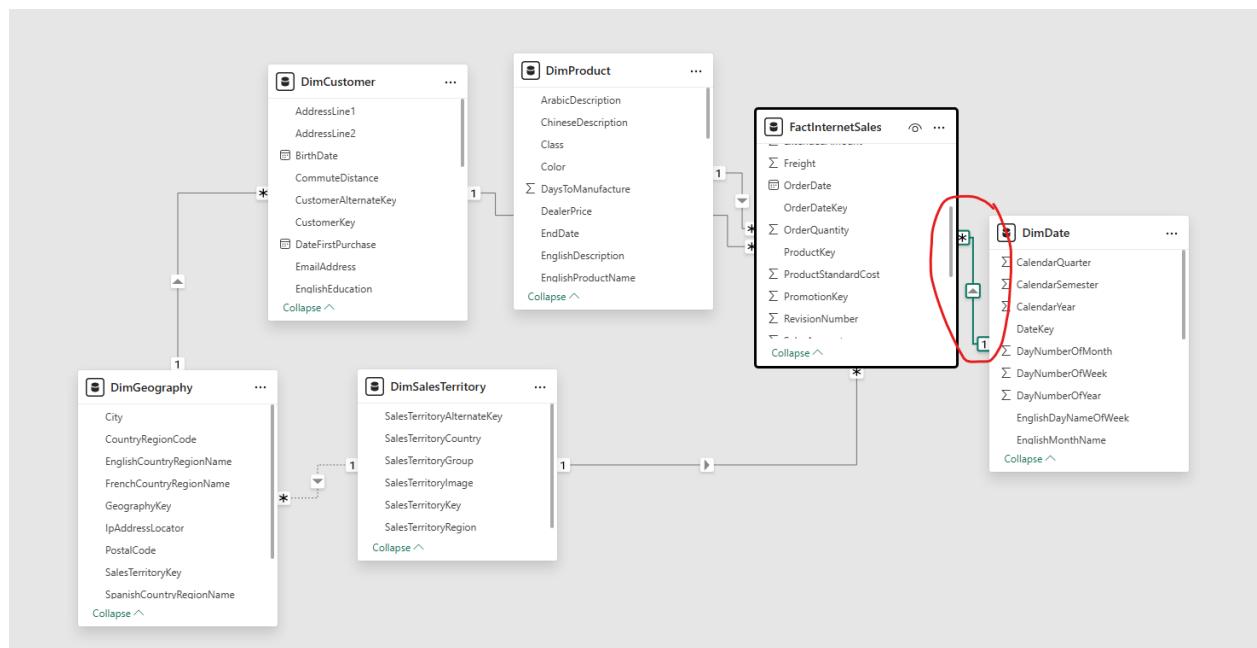
New Quick New New measure measure column table

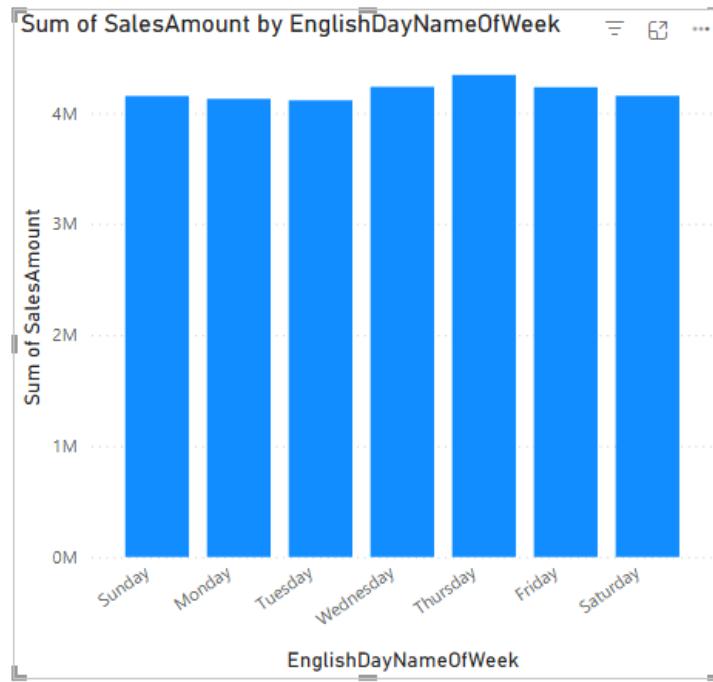
SalesTerritoryKey	SalesTerritoryAlternateKey	SalesTerritoryRegion	SalesTerritoryCountry	SalesTerritoryGroup	SalesTerritoryImage
1	1	Northwest	United States	North America	
2	2	Northeast	United States	North America	
3	3	Central	United States	North America	
4	4	Southwest	United States	North America	
5	5	Southeast	United States	North America	
6	6	Canada	Canada	North America	
7	7	France	France	Europe	
8	8	Germany	Germany	Europe	
9	9	Australia	Australia	Pacific	
10	10	United Kingdom	United Kingdom	Europe	
11	0	NA	NA	NA	

3. Create a Column chart of Sales Amount vs. English name of the week.

Solution: Establishing relationship between the table factInternetSales and Dim date to make a column chart for the sales amount and English name of the week column from the two different tables.

Date key and Order date key are common columns in the two tables which establish the relationship.





To align the bar chart as per the week start from Sunday to Monday rather than alphabet wise need to sort the column according to day number of week.

Screenshot of Power BI Desktop showing the Column tools ribbon tab selected. The EnglishDayNameOfWeek column is selected in the table editor.

Column tools ribbon:

- Name: EnglishDayNameOfW...
- Format: Text
- Summarization: Don't summarize
- Data category: Uncategorized
- Sort by column (button circled)
- Data groups
- Manage relationships
- New column

Table Editor:

DateKey	FullDateAlternateKey	DayNumberOfWeek	EnglishDayNameOfWeek	SpanishDayNameOfWeek
20060828	Monday, August 28, 2006	2	Monday	Lunes
20070806	Monday, August 6, 2007	2	Monday	Lunes
20070813	Monday, August 13, 2007	2	Monday	Lunes
20070820	Monday, August 20, 2007	2	Monday	Lunes
20070827	Monday, August 27, 2007	2	Monday	Lunes
20080804	Monday, August 4, 2008	2	Monday	Lunes
20080811	Monday, August 11, 2008	2	Monday	Lunes
20080818	Monday, August 18, 2008	2	Monday	Lunes
20080825	Monday, August 25, 2008	2	Monday	Lunes
20090803	Monday, August 3, 2009	2	Monday	Lunes
20090810	Monday, August 10, 2009	2	Monday	Lunes
20090817	Monday, August 17, 2009	2	Monday	Lunes
20090824	Monday, August 24, 2009	2	Monday	Lunes
20090831	Monday, August 31, 2009	2	Monday	Lunes
20100802	Monday, August 2, 2010	2	Monday	Lunes
20100809	Monday, August 9, 2010	2	Monday	Lunes
20100816	Monday, August 16, 2010	2	Monday	Lunes

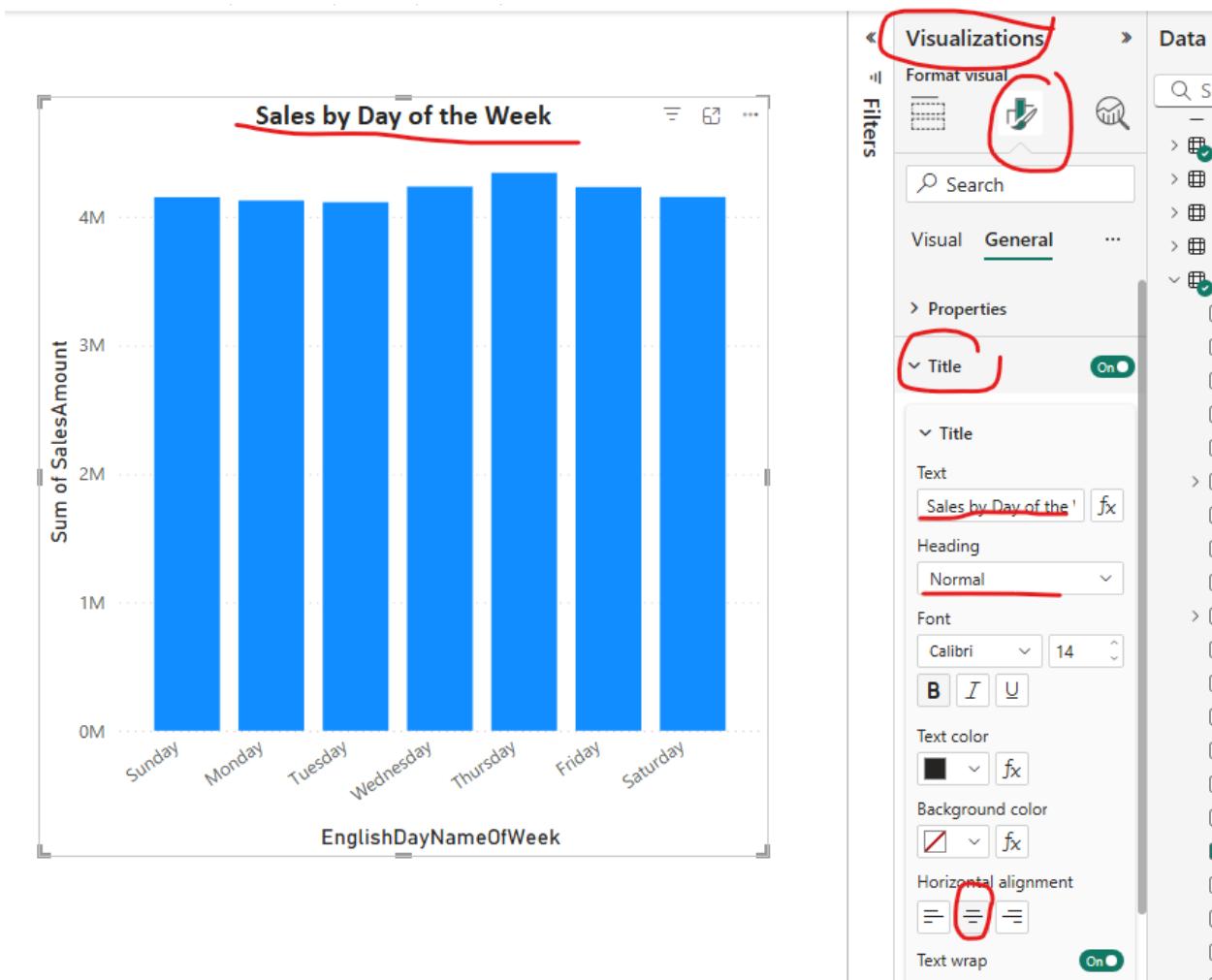
Available columns dropdown:

- EnglishDayNameOfWeek
- CalendarQuarter
- CalendarSemester
- CalendarYear
- DateKey
- DayNumberOfMonth
- DayNumberOfYear
- EnglishMonthName
- FiscalQuarter
- FiscalSemester
- FiscalYear
- FrenchDayNameOfWeek

Selected column: DayNumberOfWeek

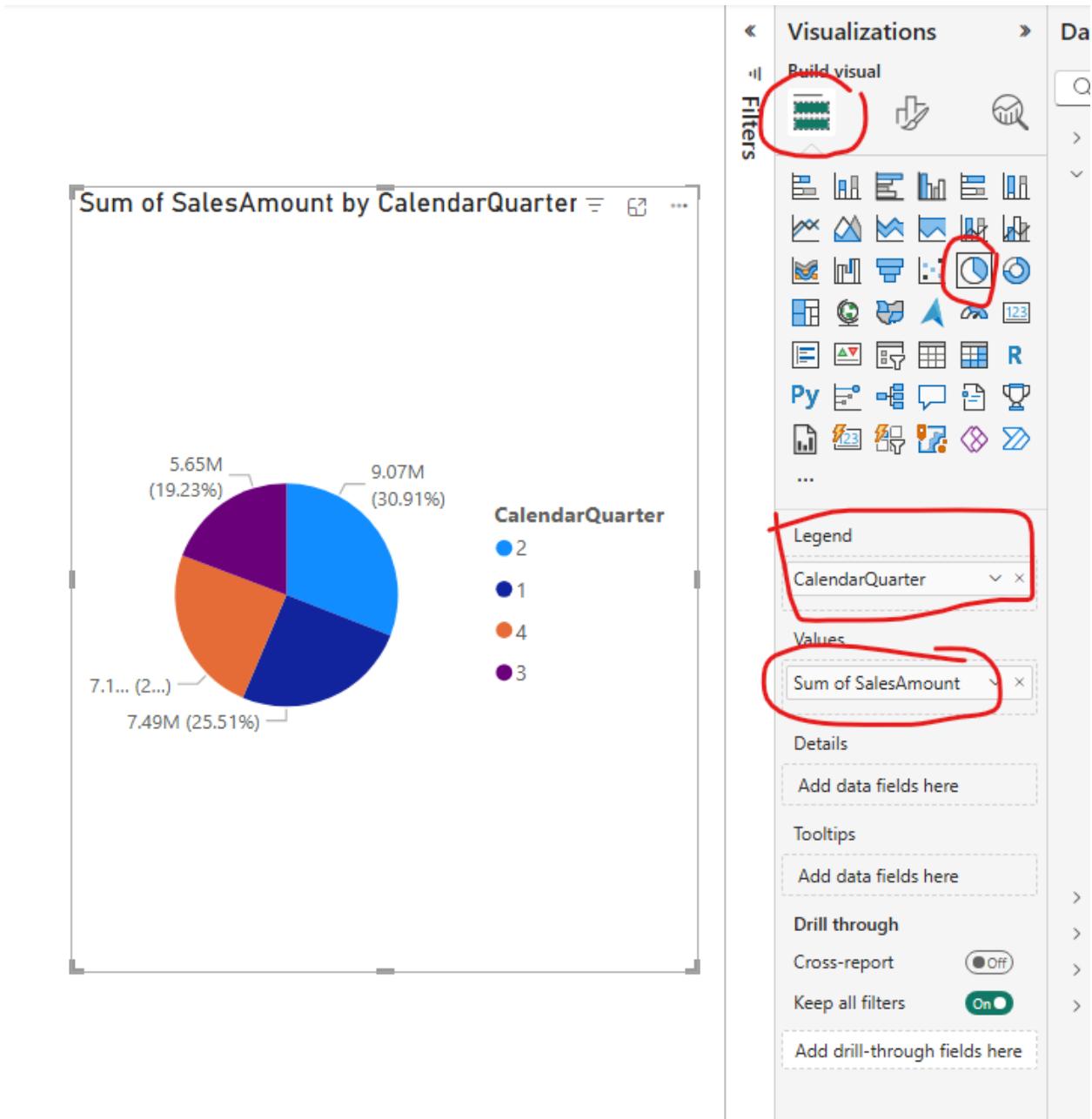
3) Rename the title as Sales by day of the Week and center align it.

Solution:

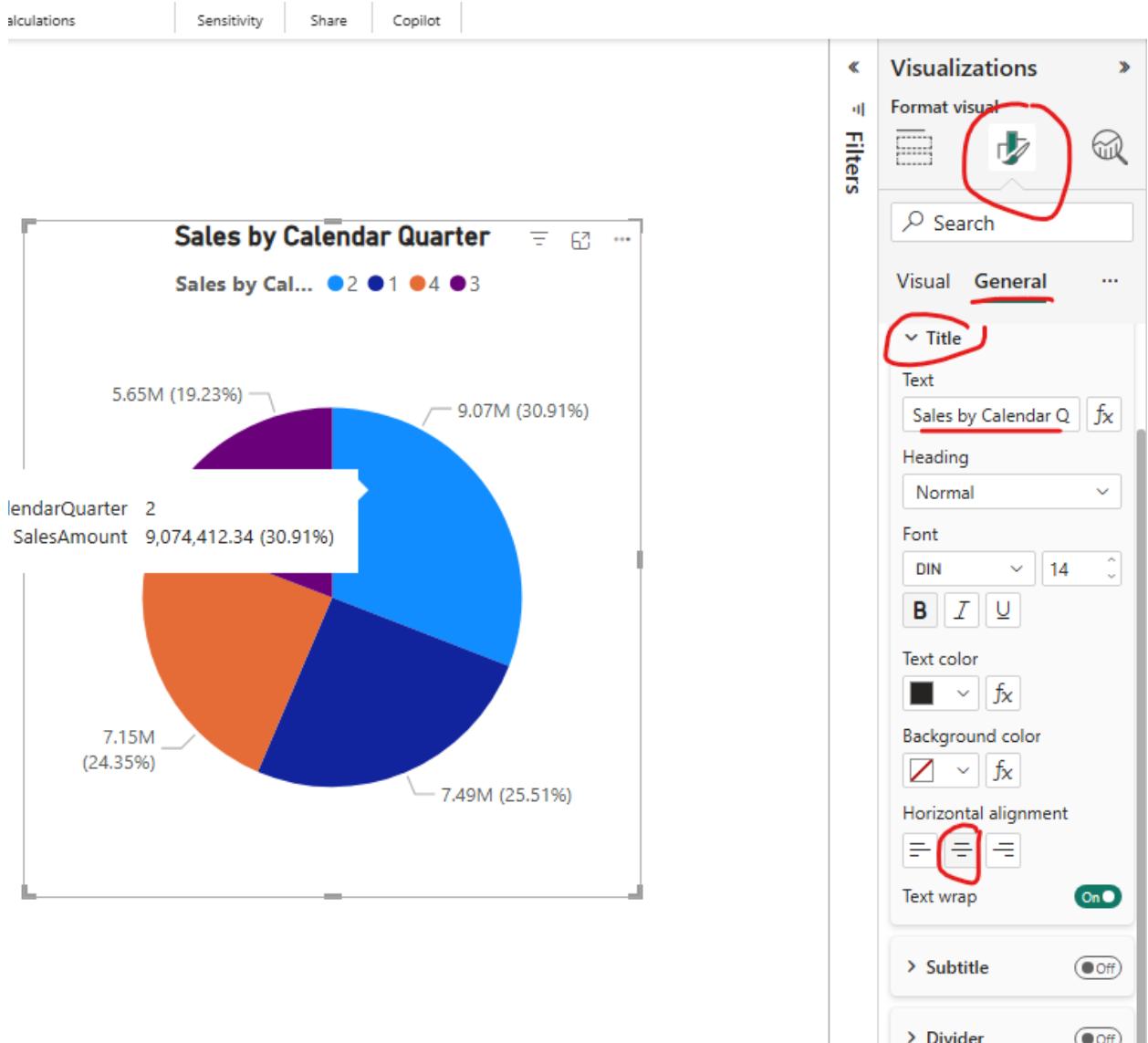


4) Create a Pie chart with legend as Calendar Quarter and values as Sales Amount.

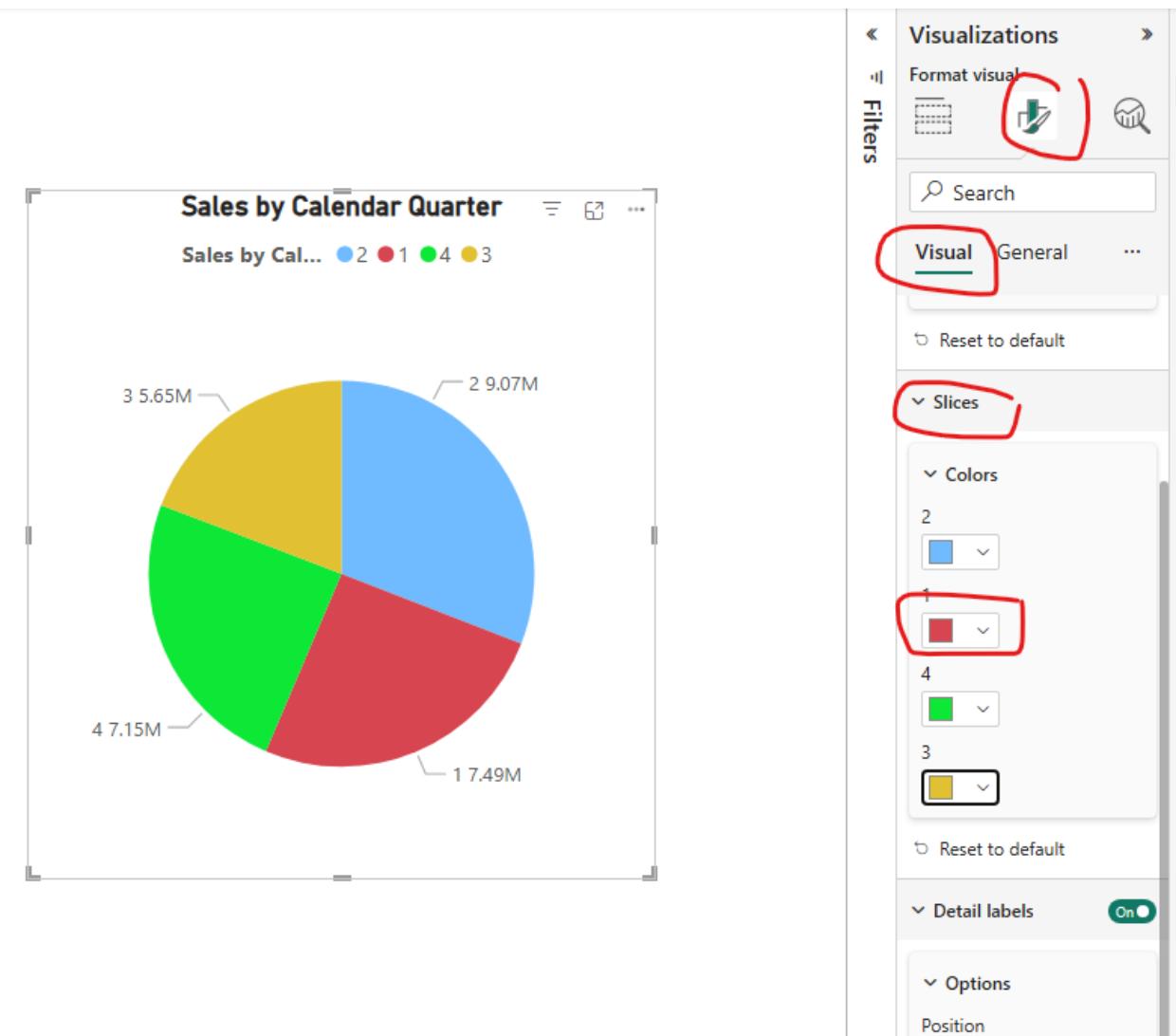
Solution:



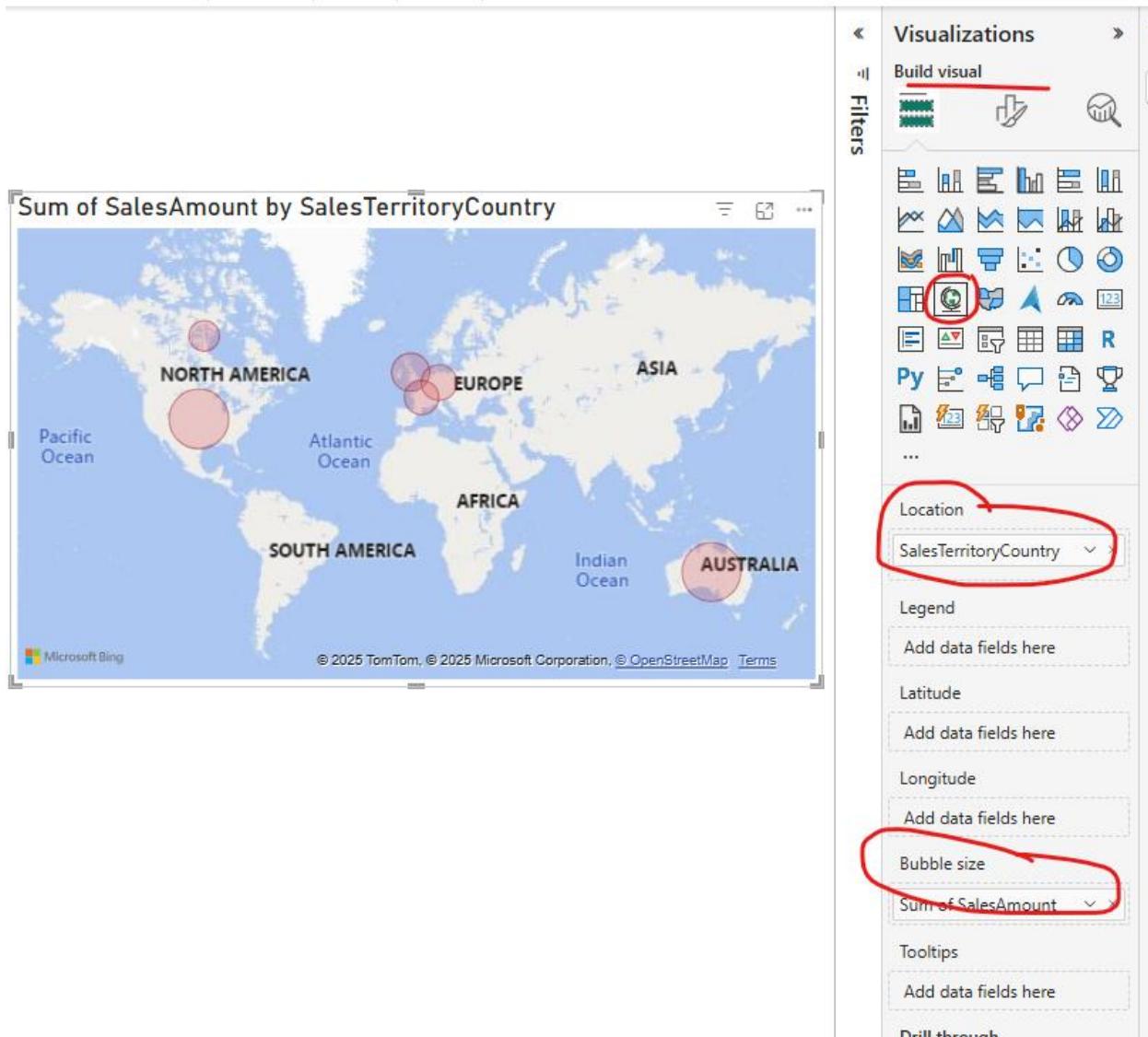
5) Rename the title as Sales by Calendar Quarter and center align



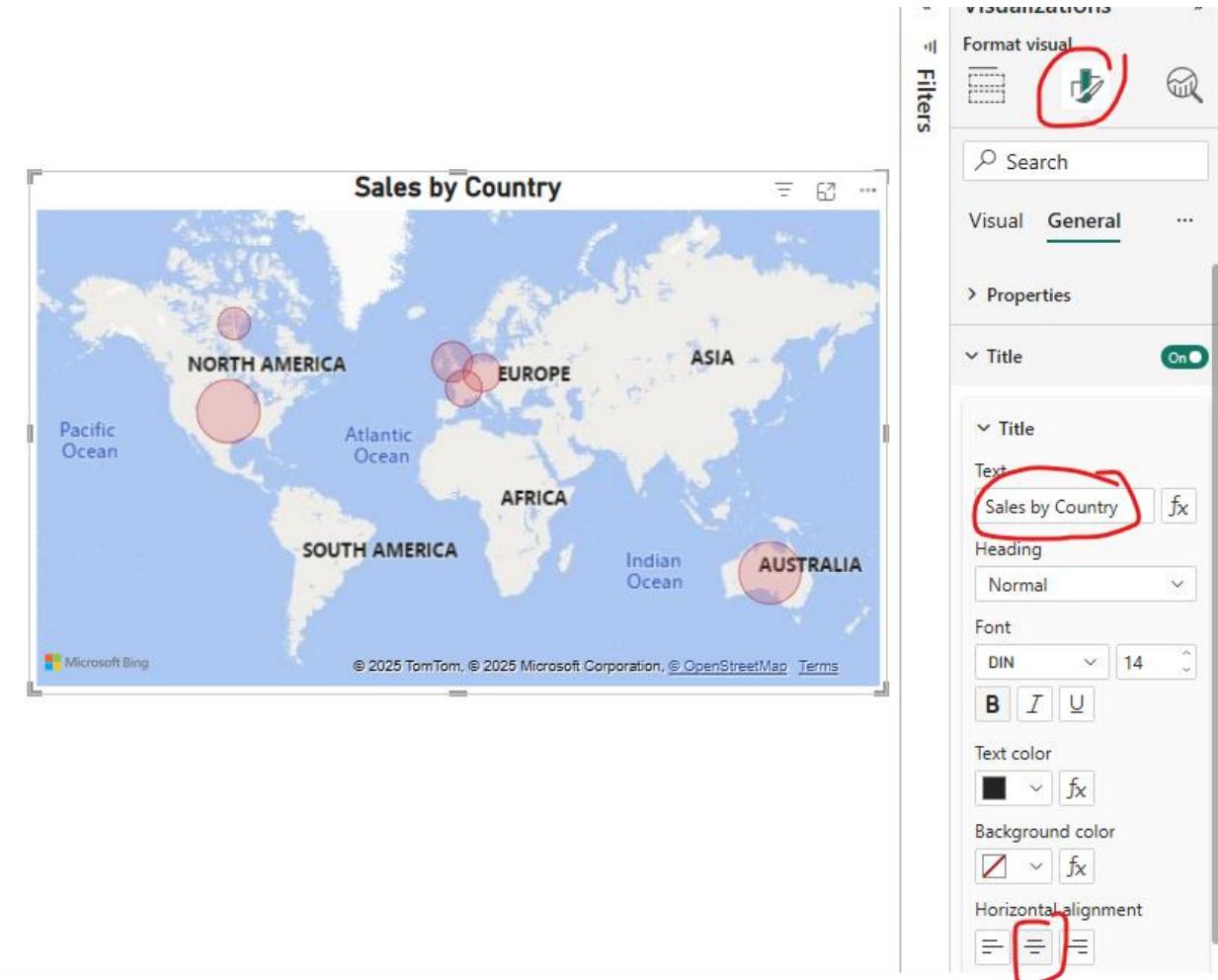
6) In the pie chart, give 1st Quarter Red color, 2nd Quarter blue color, 3rd Quarter yellow and 4th Quarter green.



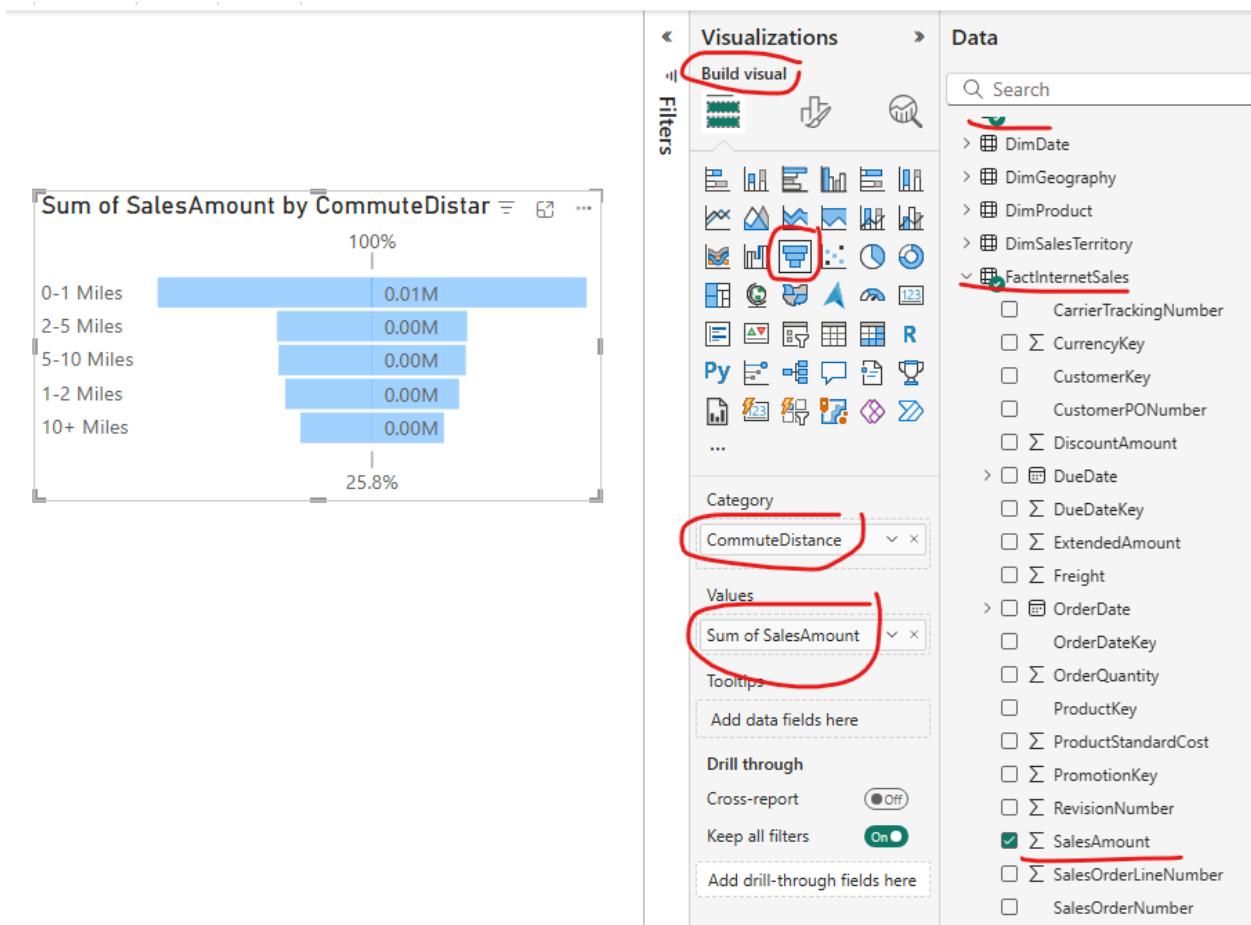
7) Create a Map visual with Sales Territory Country and Sales Amount.



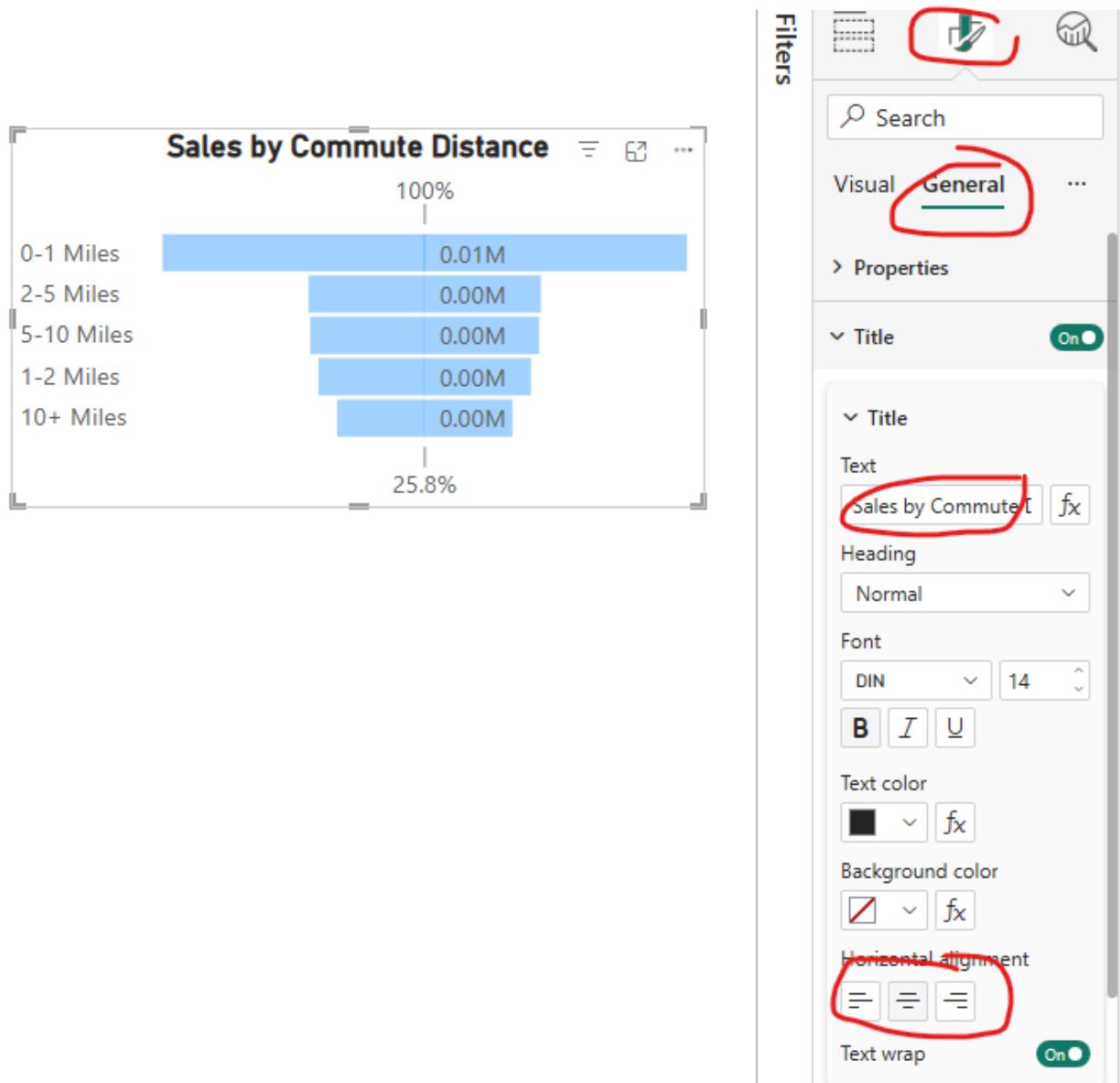
8) Rename it as sales by country and center align.



9) Create a Funnel of Commute Distance and Sales Amount.



11. Rename it as Sales by commute Distance and center align it.



12) Save it as Adventure Works Sales.

