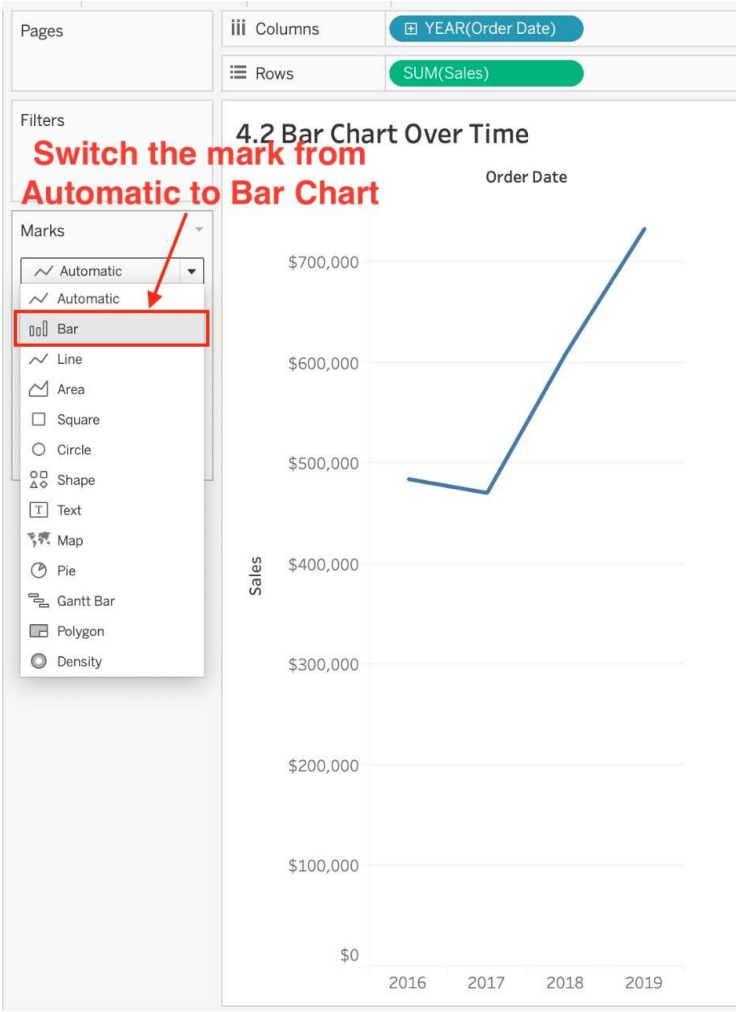
EXERCISE 02: Creating Bar Charts for Data Over Time

As an analyst, one of the most common requests that stakeholders will have is about comparing certain KPIs/metrics over time (for example, revenue quarter on quarter). In this section of the book, you will use date dimensions to create charts with which you can compare your KPIs over a certain time period. You will use date dimensions to compare metrics using a bar chart first and then move on to using line charts for KPI comparison.

Imagine you are a business analyst who is asked to provide a report about the total sales of your organization in different segments, namely, **Consumer**, **Corporate**, and **Home Office**, over a period of time. Use the **sample Superstore** dataset provided by Tableau to visualize the chart and display the output.

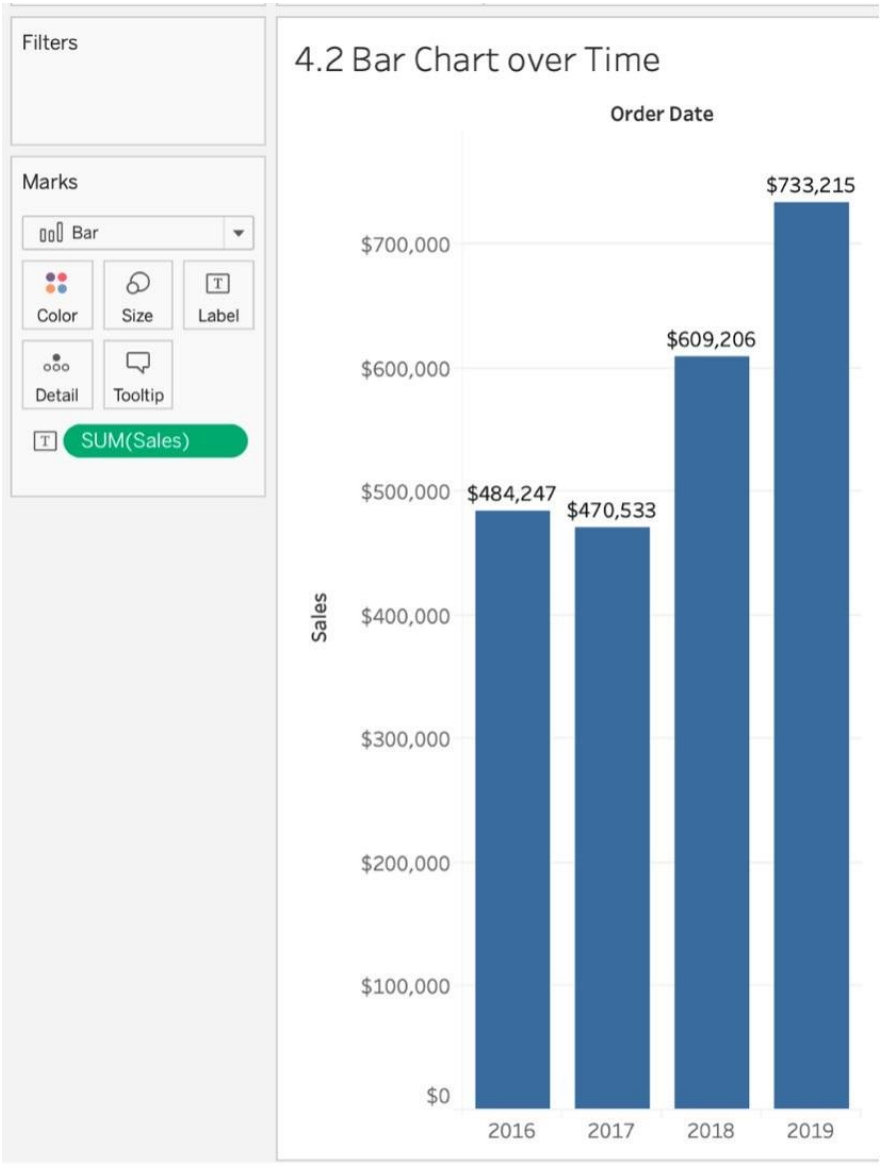
Perform the following steps to complete the exercise:

1) Load the **Orders** table from the **sample Superstore** dataset in your Tableau instance.
2) Drag **Sales** to your **Rows** shelf.
3) Add **Order Date** to the **Columns** shelf. Tableau will automatically create a line chart (which will be covered in detail in the next exercise).



The preceding figure shows the sales of the products on a yearly basis in the form of a line chart. To change the marks from line chart to bar chart, click first on the dropdown in the Marks shelf, then Bar as shown in the preceding figure. The view can be read as **sales by year**.

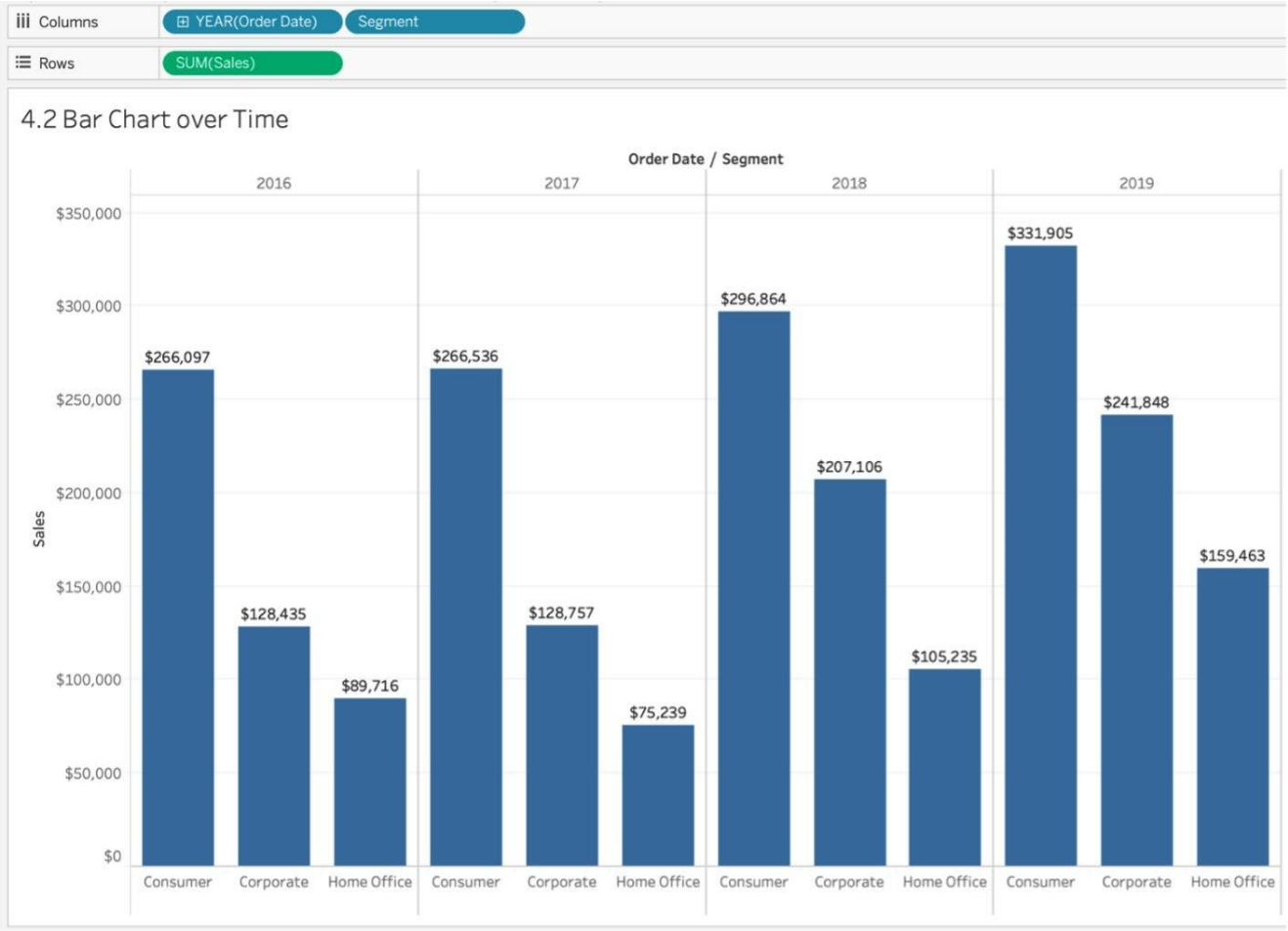
4) For readability, add **Label** to **Bars** by dragging **Sales** from the **measures** Data pane to the **label** in the **Marks** card:



As you can see, by adding the labels, you have the exact sales values earned in the respective years. But you still don't know the value of sales earned over time for each of the segments. You will have to change the granularity of the view from sales by year to sales by year by segment.

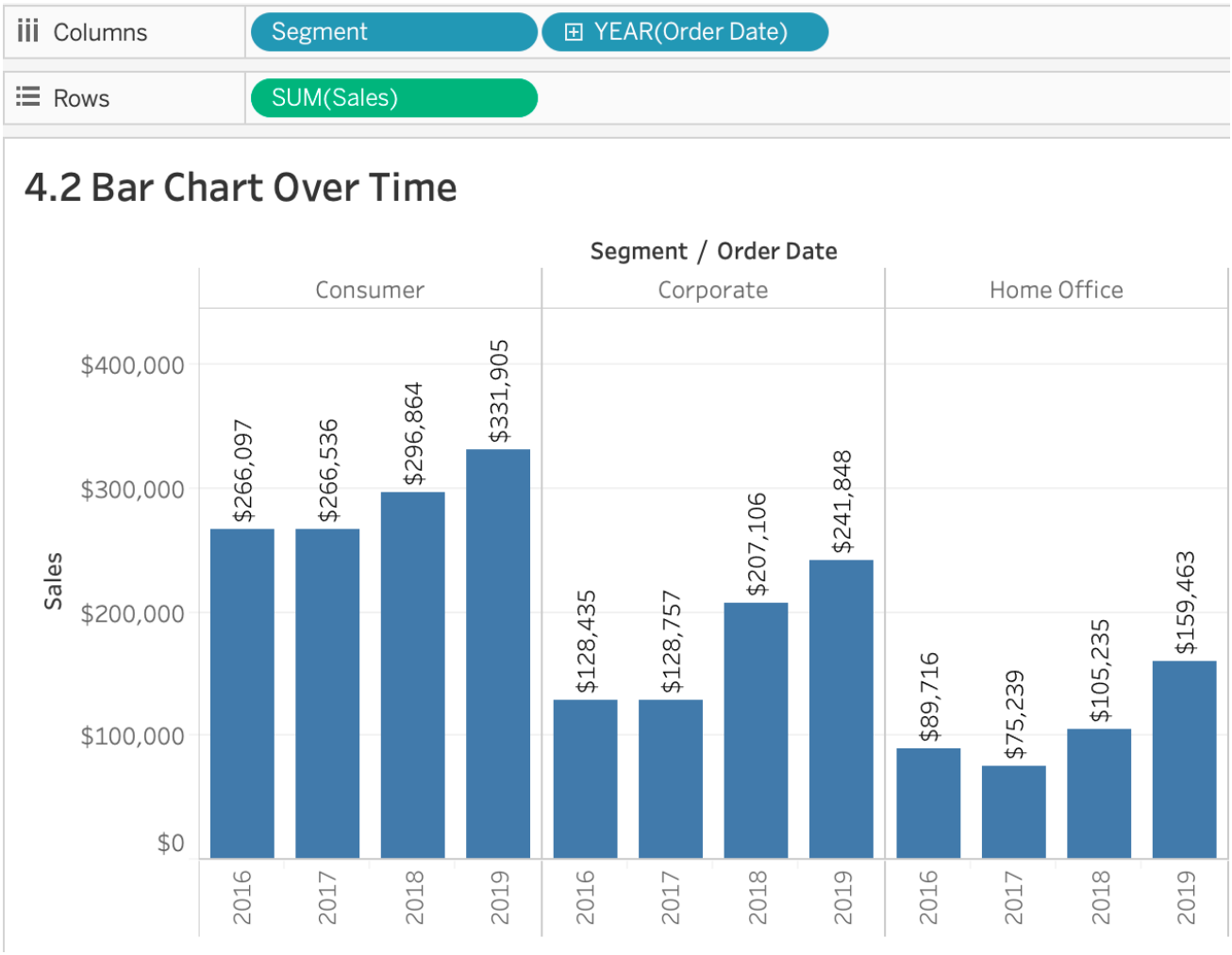
5) To achieve that, drag **Segment** to the **Columns** shelf.

The view can change a lot depending on where you place your **Segment** on the **Columns** shelf. If you place **Segment** after **Order Date**, your view will read as sales by year by segment with the following view:



From the preceding figure, it is clear that there has been progressive growth over the years, and you can also see the exact sales values for the segments. Although you got the data that you wanted, it is also important to present it in a formulated way. It will be more useful and understandable if you have the data for **Consumer** over the years together and the data for **Corporate** and **Home Office** together.

6) To do this, place **Segment** before **Order Date**. Your view will read as sales by segment by year with the following view:



In the previous two figures you had sales by year by segment, and sales by segment by year. This allows any stakeholder to take a quick peek at the sales trend for each of your segments. As you can see, **Corporate** saw considerable growth from 2017 to 2018, which was not easily understandable from the previous screenshot.