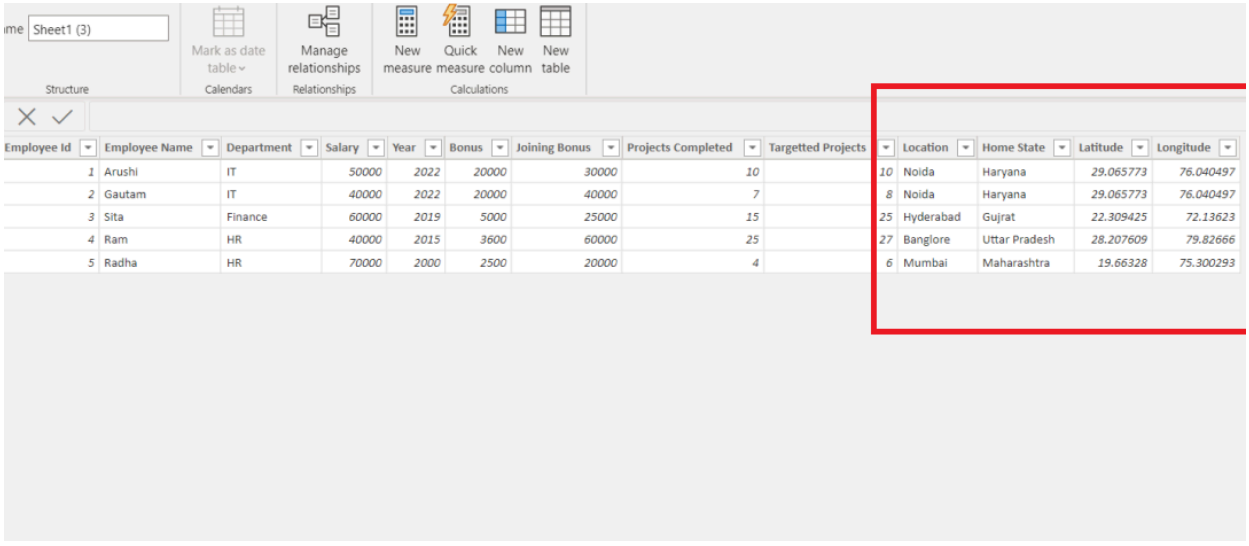
Power BI - How to Create a Map?

A **map** only locates the location as a data point, whether it's a **continent**, **country**, **state**, **city**, etc. Maps can also be plotted with the help of **latitude** and **longitude**. **Maps** can be useful, to know the current running business over different geographical locations. For example, if **geeks for geeks** want to analyze the **number of watch times** on their website in different **states**, then a map can be a useful tool, for better visualization. In this article, we will learn how to create a map in Power BI.

Creating a Map in Power BI

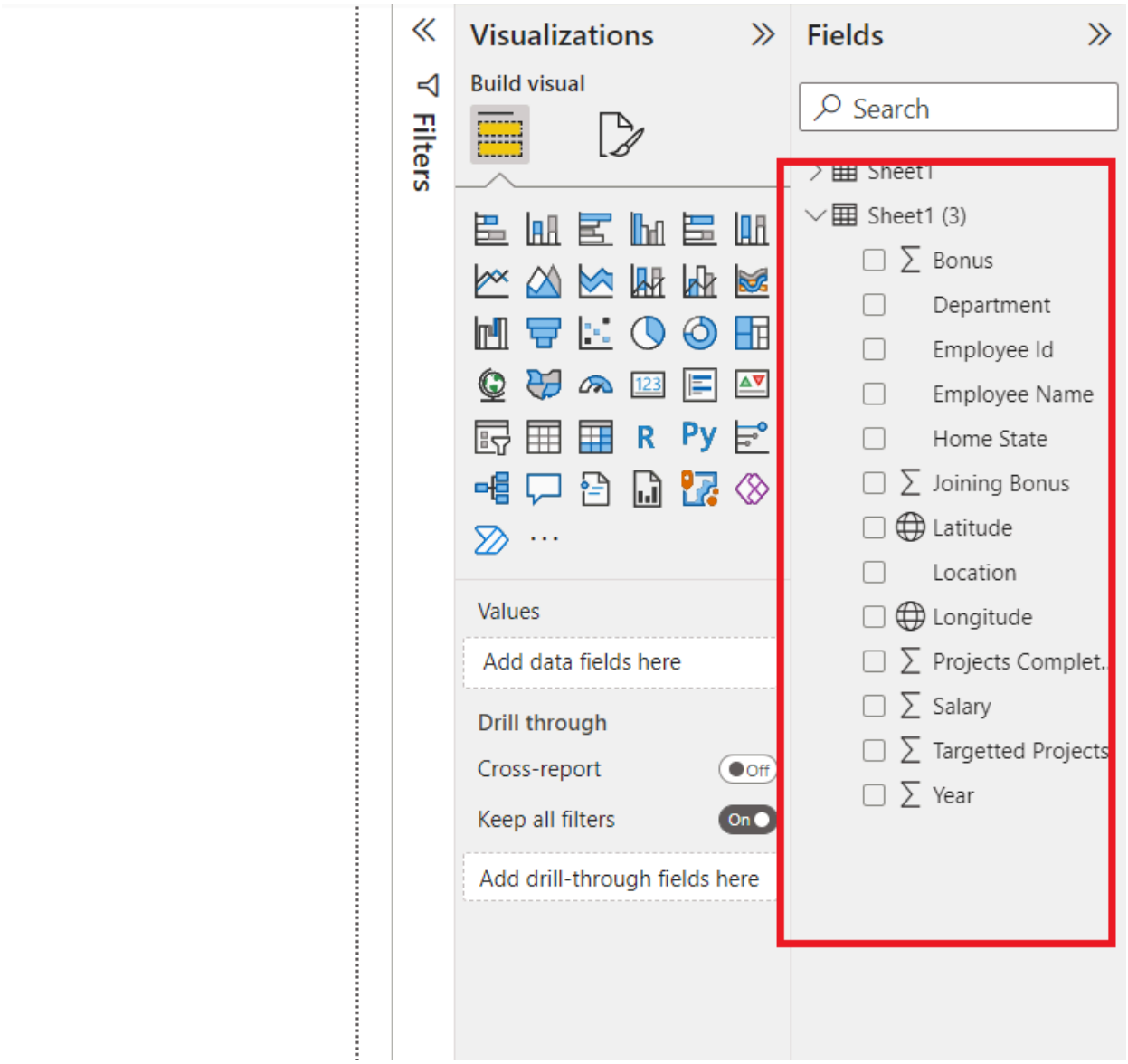
A map has multiple options while **creating**, and **customizing** it. We will take a look at each of the options. For example, we are given a dataset of **Employees**, and we want to make a map, consisting of **location** as **location(city names), legends** as **Department**, **bubble size** as **Bonus**, and **tooltips** as **Employee name** and **Salary**. We will explore each option while creating this map.



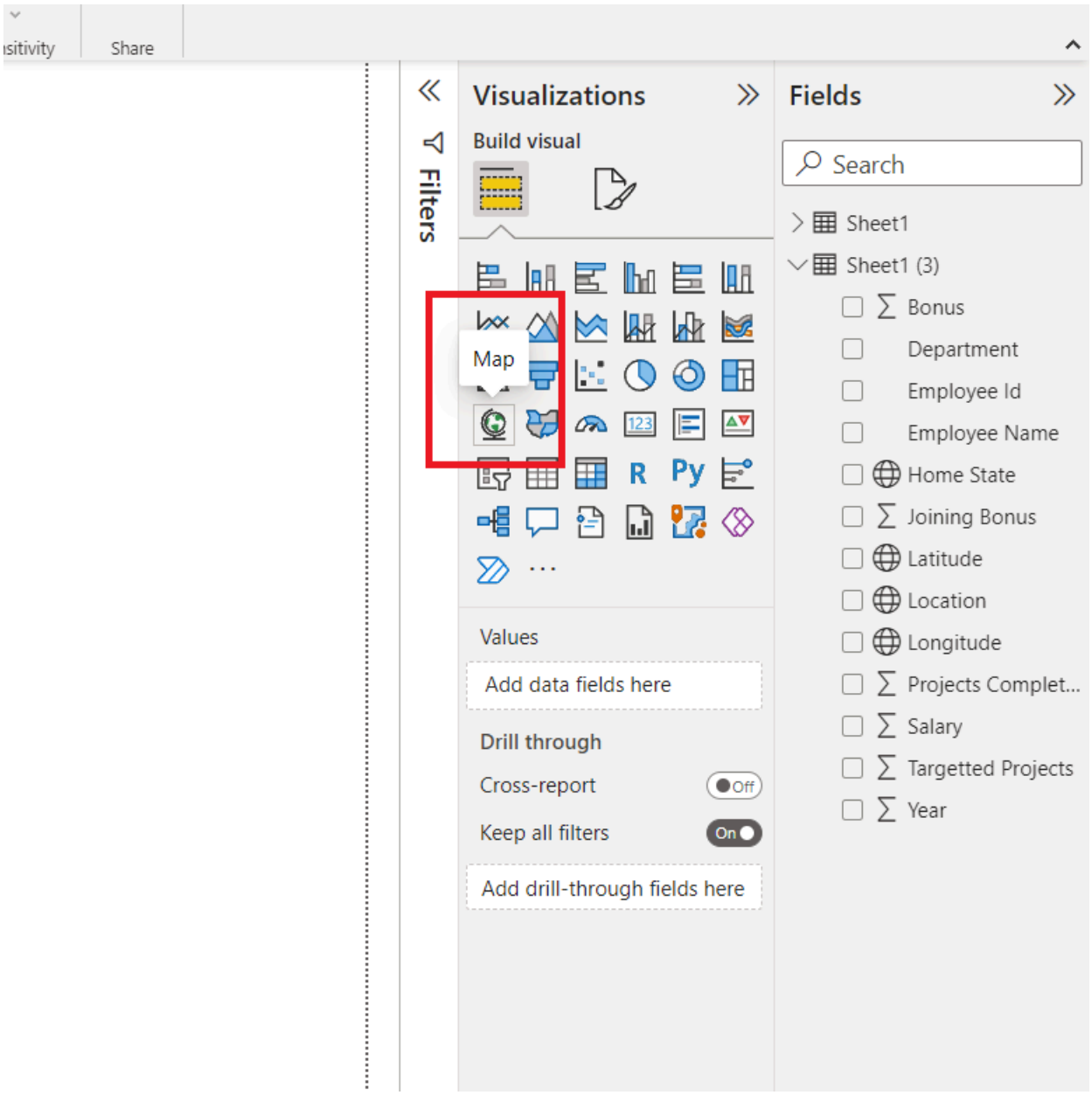
Employee Id	Employee Name	Department	Salary	Year	Bonus	Joining Bonus	Projects Completed	Targetted Projects	Location	Home State	Latitude	Longitude
1	Arushi	IT	50000	2022	20000	30000	10	10	Noida	Haryana	29.065773	76.040497
2	Gautam	IT	40000	2022	20000	40000	7	8	Noida	Haryana	29.065773	76.040497
3	Sita	Finance	60000	2019	5000	25000	15	25	Hyderabad	Gujrat	22.309425	72.13623
4	Ram	HR	40000	2015	3600	60000	25	27	Banglore	Uttar Pradesh	28.207609	79.82666
5	Radha	HR	70000	2000	2500	20000	4	6	Mumbai	Maharashtra	19.66328	75.300293

The following are the steps:

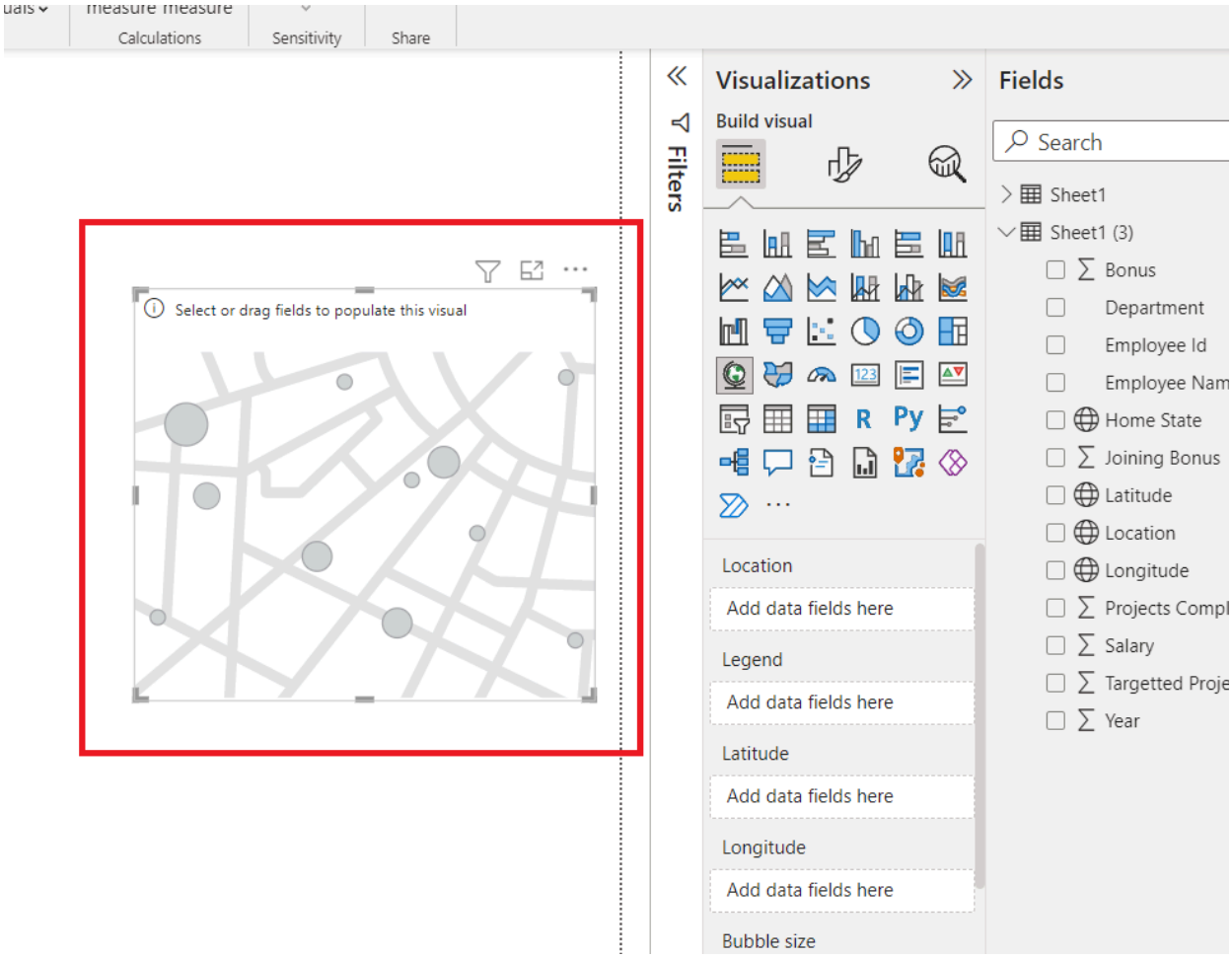
Step 1: Given the **dataset**, **Employee**. The columns we will use for this article are **Location**, **Department**, **Salary**, **Bonus**, **Employee Name**, **Latitude**, and **Longitude**.



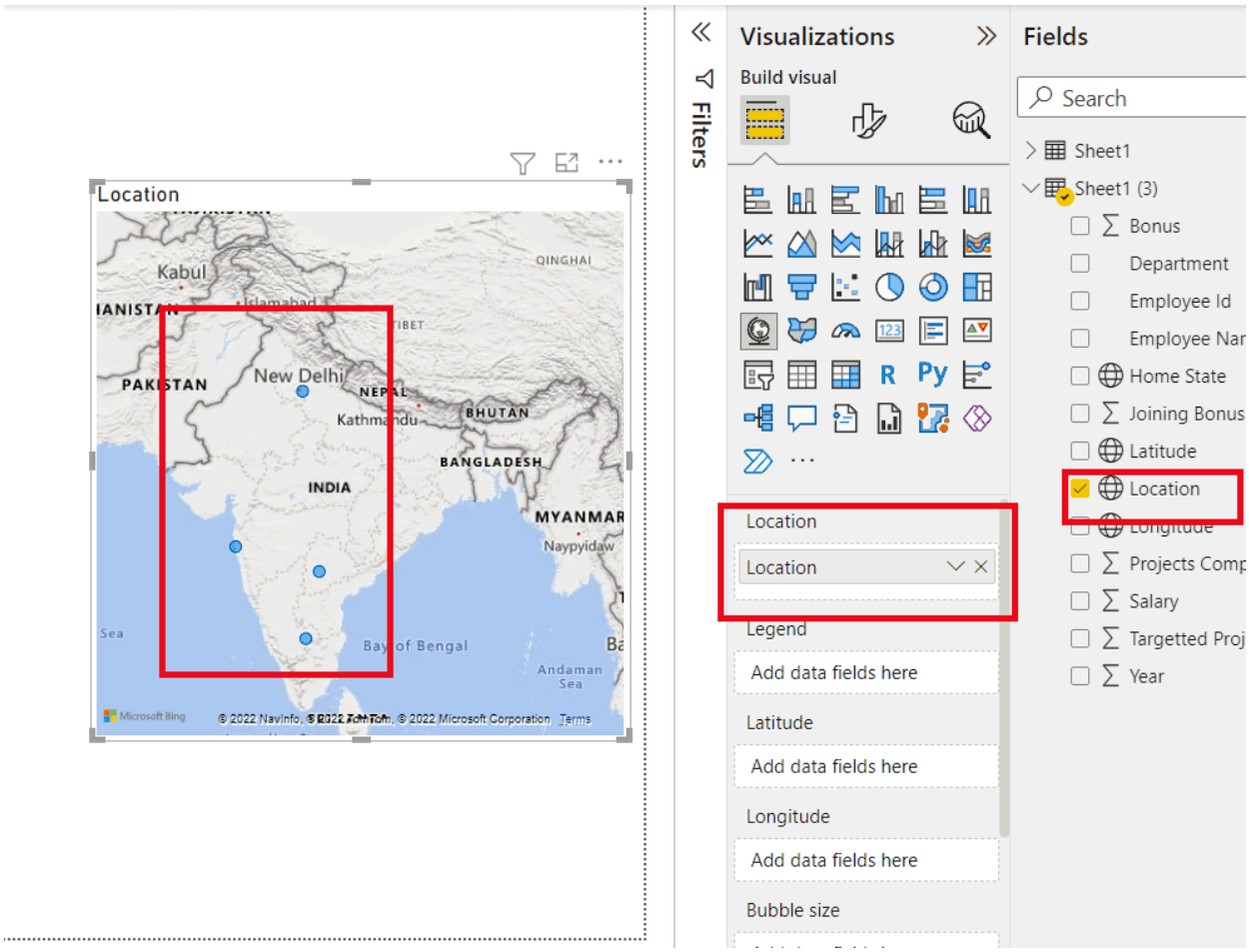
Step 2: Under the **Visualizations** section, click on the **Map**.



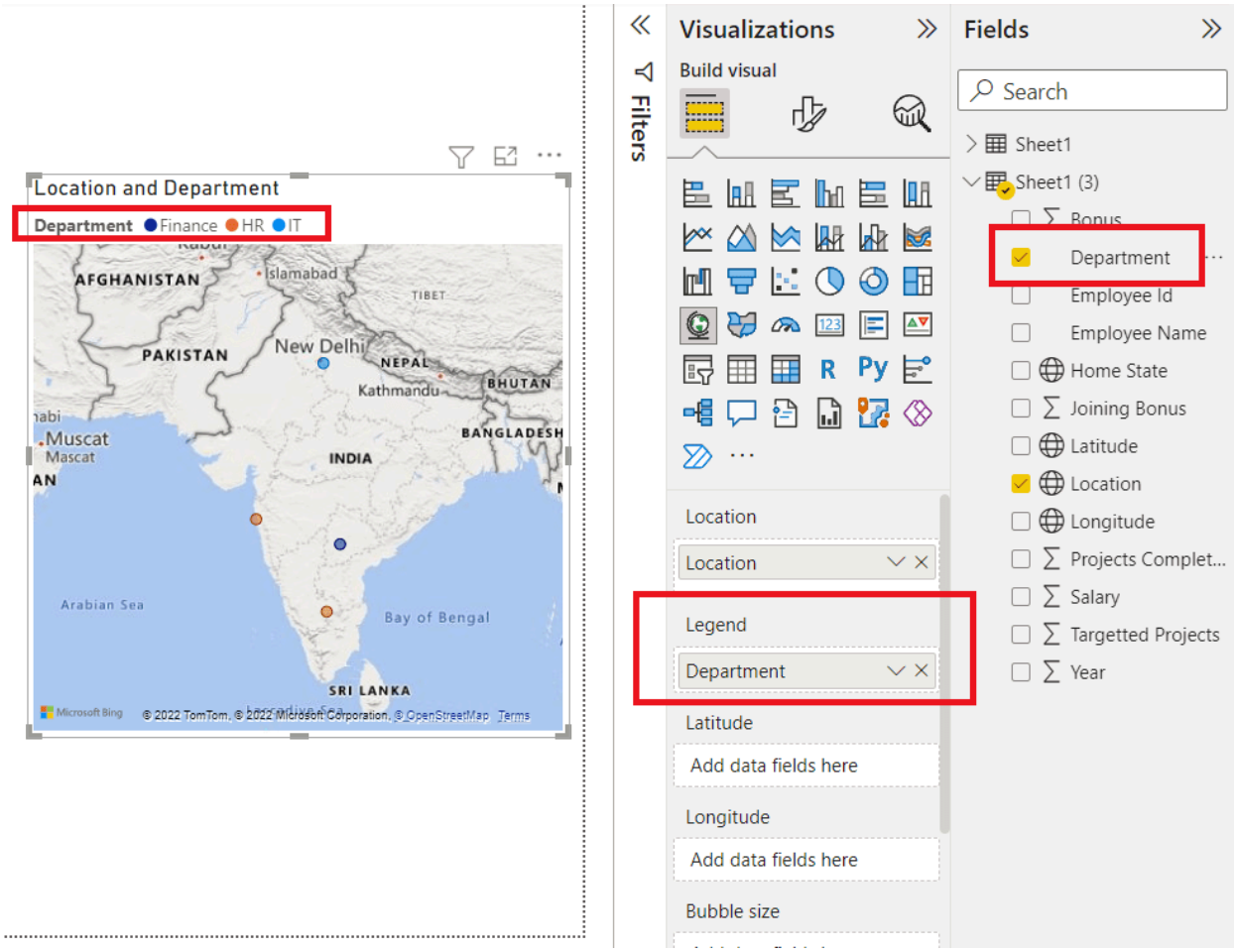
Step 3: An empty map is created. This map does not contain any fields. Our next task is to **add columns** to it.



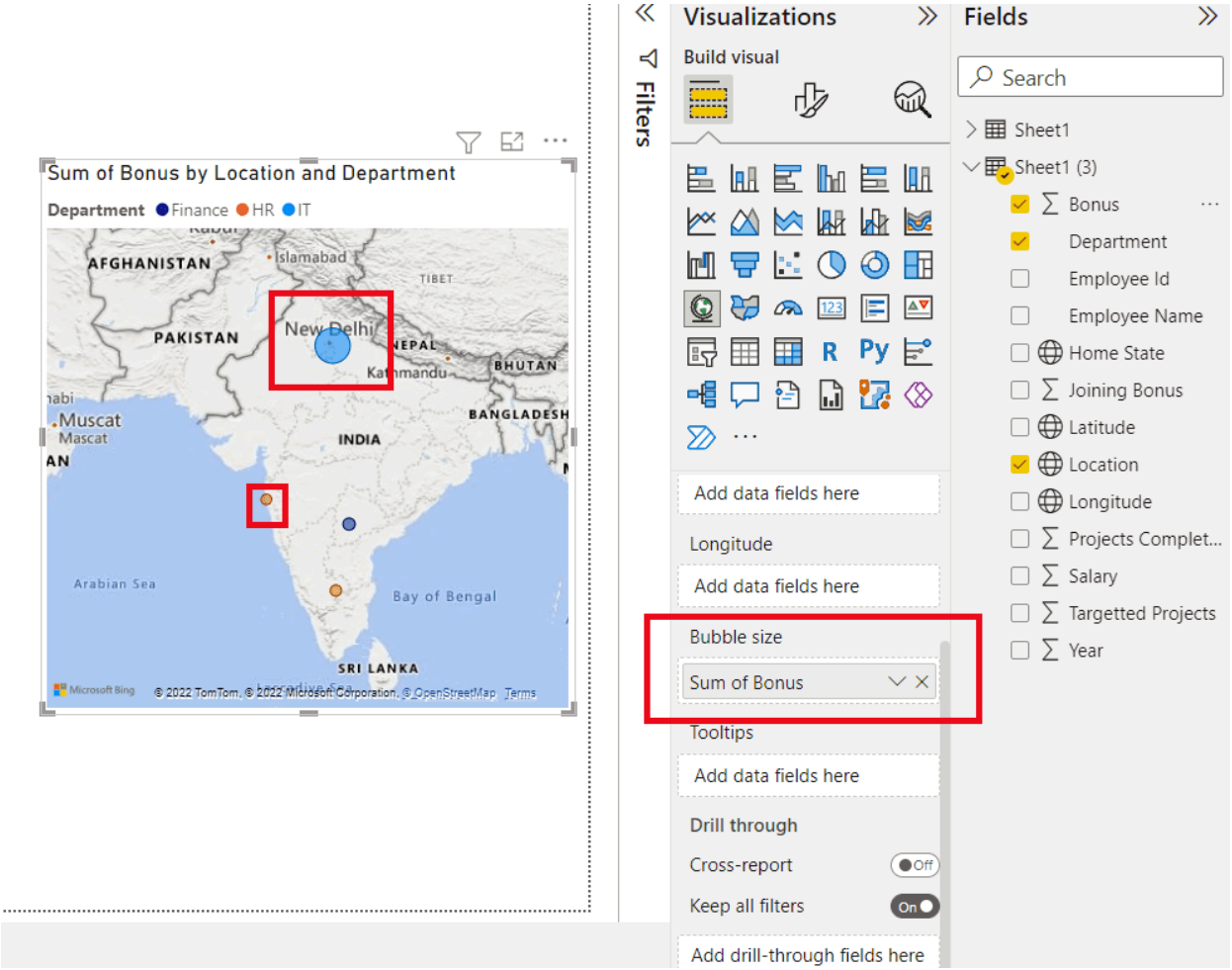
Step 4: Adding **Location** in the map. **Drag** and **drop Location** into the **location** section. We can see that the cities in the dataset have appeared on the map. We can also observe, all the cities are of the same color i.e. **blue**.



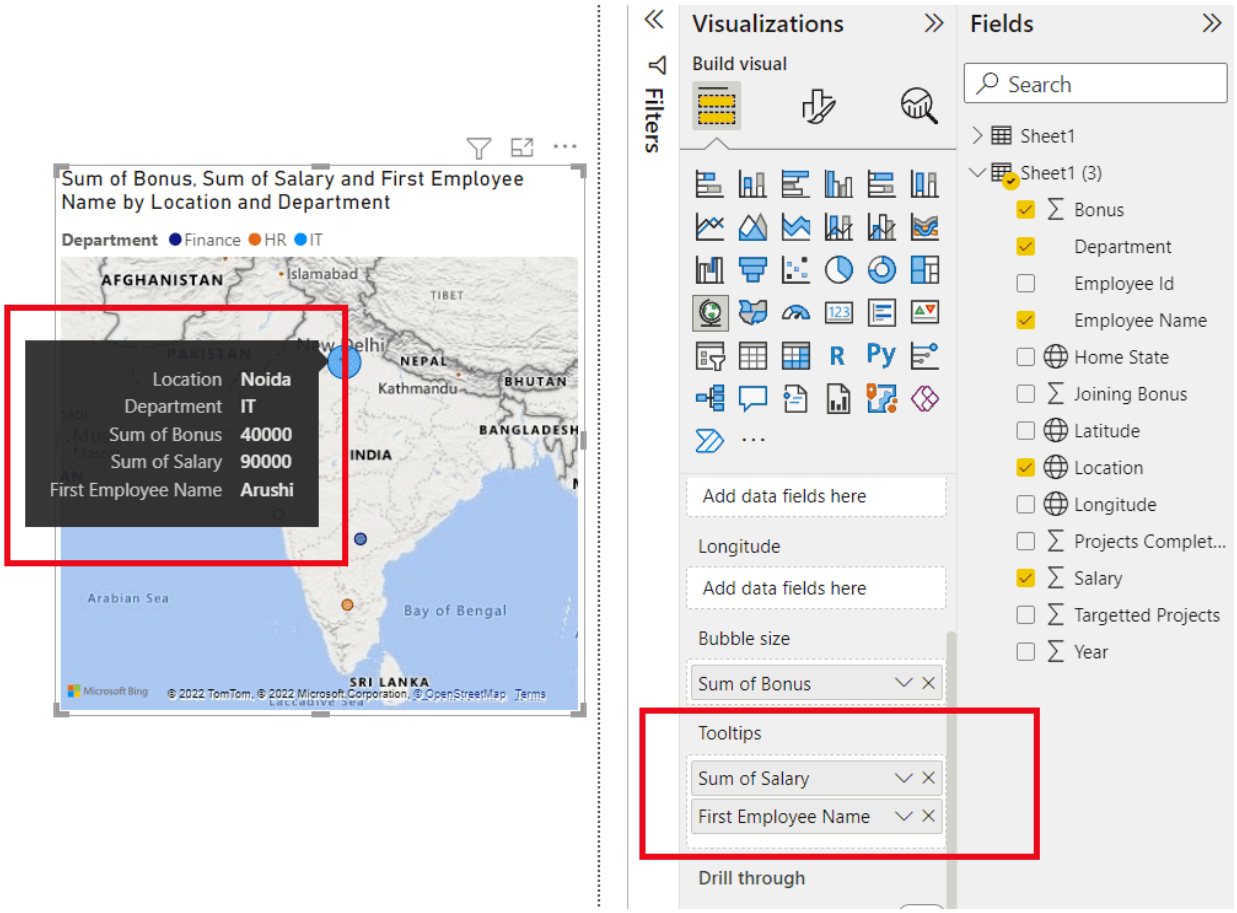
Step 5: Legends, help sub-categorize the data. It is preferred to use **legends**, on **categorical data**. **Drag** and **drop Department**, under the **Legend** section. We can see in the image, that, each **department**, gets its own **color**. For example, the **IT department** got a **Blue** color, and hence the **Salary** of **Arushi** and **Gautam** is shown on the blue data point.



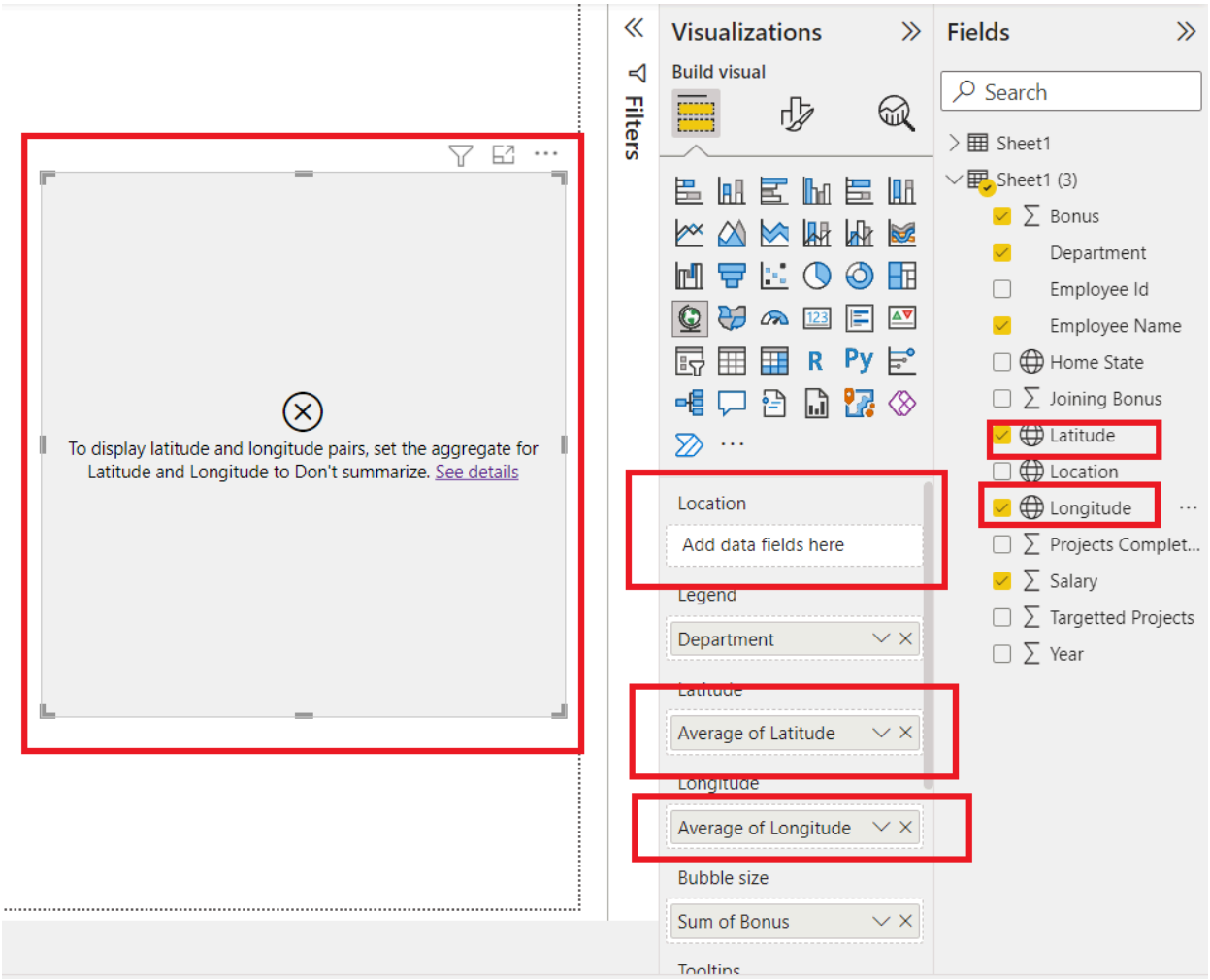
Step 6: Bubble size refers to the quantity of a column. The **larger** the **numeric value**, the greater will be the **size** of the **bubble**. **Drag** and **drop** **Bonus** into the **Bubble size** section.



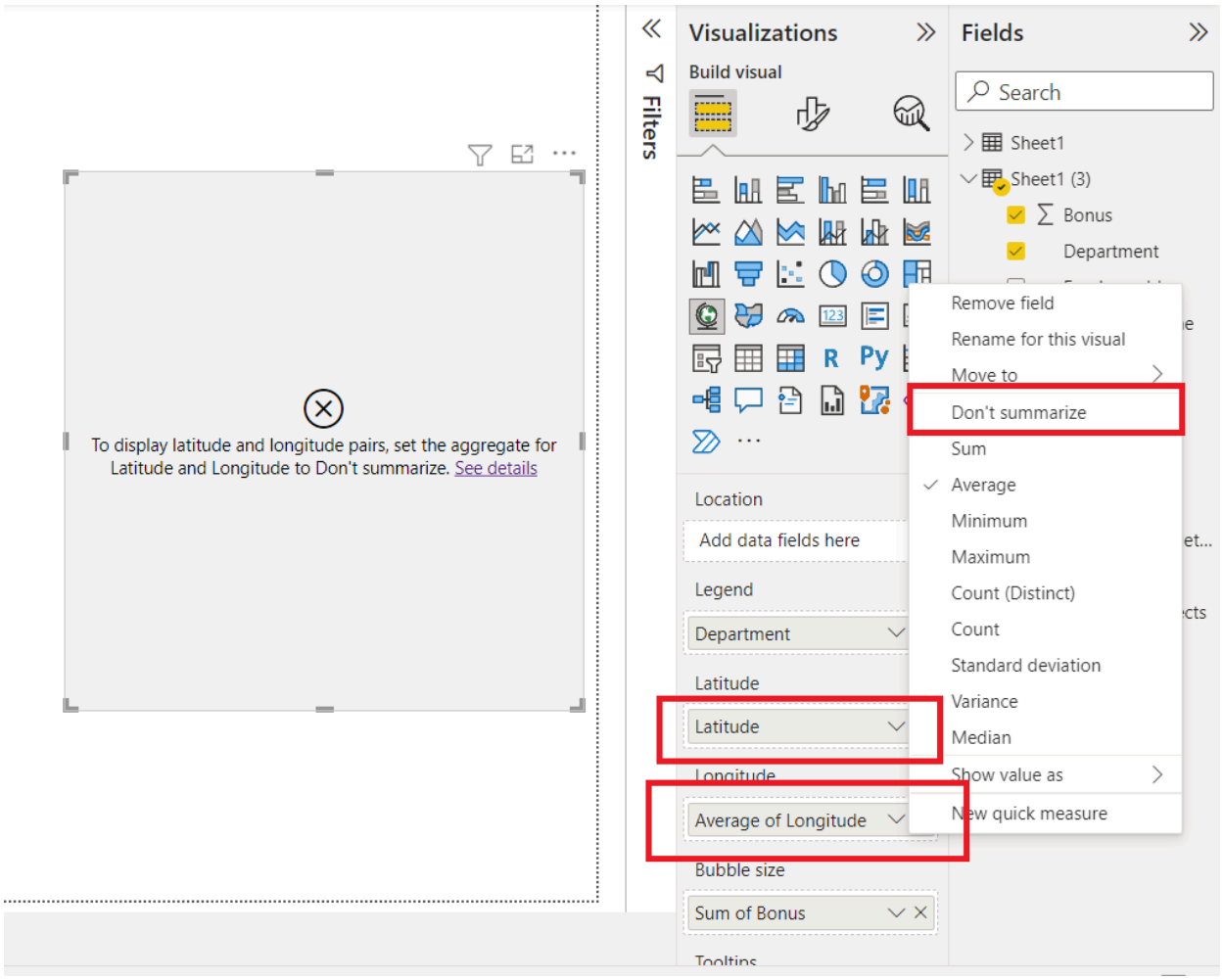
Step 7: Our next task, is to add **Tooltips** to the map. **Tooltips** provide additional information that we want to see, whenever we **hover** at a **data point**. In the below image, we can see that, we have **hovered** at **Noida**, and we view the previously added tooltips i.e.**Location Noida**, and **Department IT**. These tooltips appeared, as we have added, these measures previously. Now, think what if we want to add **Employee Name**, and **Salary** to this list? **Drag** and **drop Employee Name** and **Salary** under **Tooltips**. Now, again hover over **Noida**.



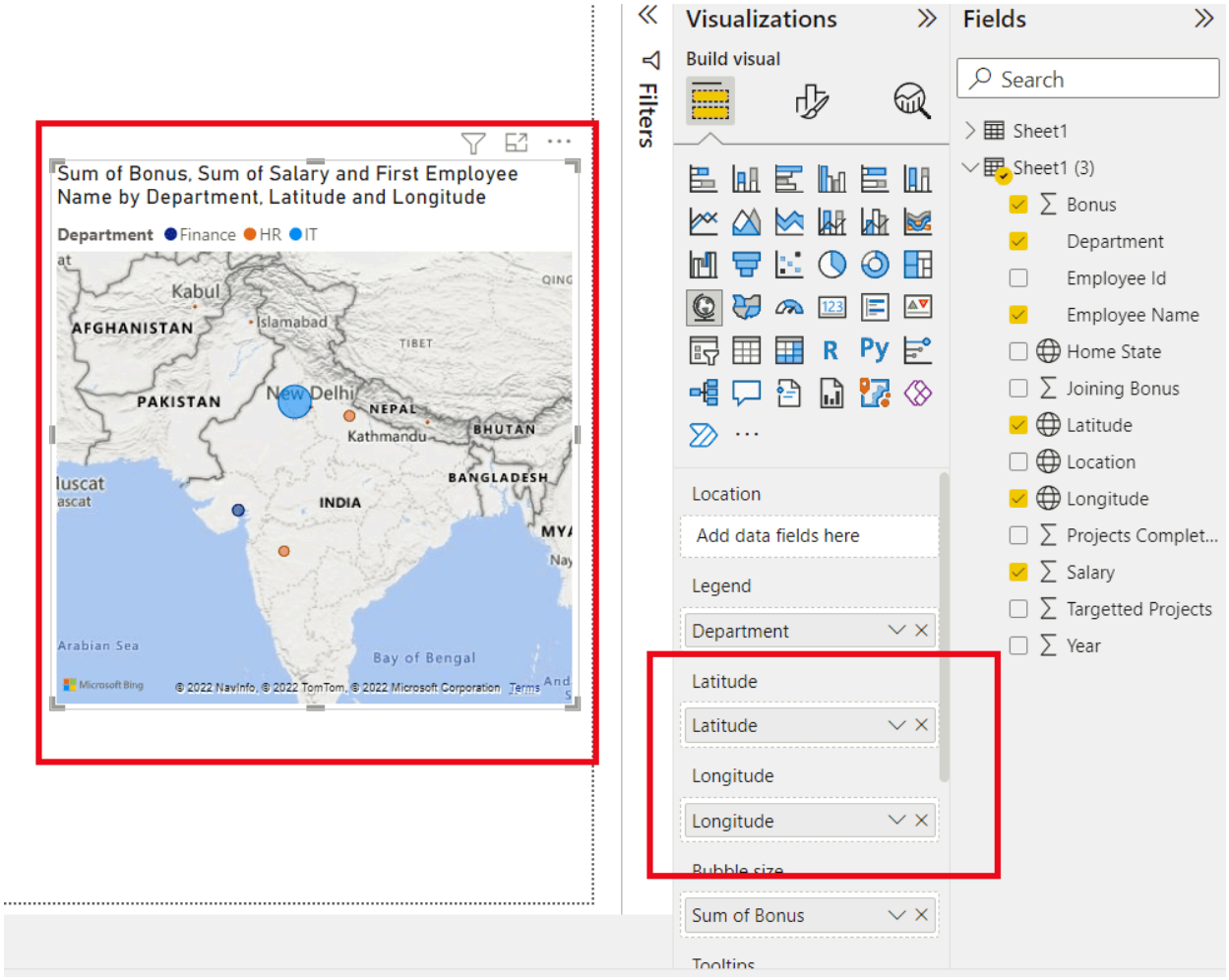
Step 9: We can also add **latitude** and **longitude**, instead of **location** into our map. **Latitude** and **Longitude** are the data points, which tell a particular position on the globe. Remove, **Location** under the **Location** section, and add **Latitude** and **Longitude** into the map. We can observe that an error came, this happened because, by default, PowerBI summarizes the numerical values, and hence we received an error.



Step 10: To remove the error, simply **right-click** on the **longitude**. A drop-down appears. Click on the don't summarize option. Repeat the same for **latitude**.



Step 11: We can see that a map is successfully created.


Sum of Bonus, Sum of Salary and First Employee Name by Department, Latitude and Longitude
Department Finance HR IT
Kabul
AFGHANISTAN
Islamabad
TIBET
PAKISTAN
New Delhi
NEPAL
Kathmandu
BHUTAN
BANGLADESH
INDIA
Arabian Sea
Bay of Bengal
© 2022 NavInfo, © 2022 TomTom, © 2022 Microsoft Corporation Terms
Filters
Visualizations
Build visual
Location
Add data fields here
Legend
Department
Latitude
Latitude
Longitude
Longitude
Bubble size
Sum of Bonus
Tooltips
Fields
Search
Sheet1
Sheet1 (3)
Bonus
Department
Employee Id
Employee Name
Home State
Joining Bonus
Latitude
Location
Longitude
Projects Complet...
Salary
Targetted Projects
Year