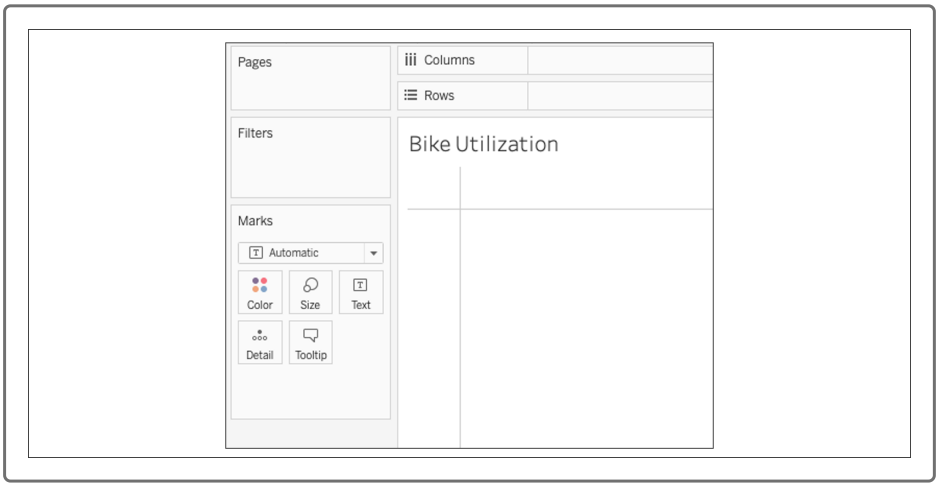
14.3.6 Determine Bike Utilization

Your investors are curious about the bike utilization during the month of August. You'll need to show the utilization of each Citi Bike in New York City. This will continue to help you understand the needs of a bike-sharing business in Des Moines. For this task you'll use the bike ID as a metric for determining which bikes have the highest utilization.

Now that we've found the number of trips per bike during the month of August, we should figure out how long those rides are and if there are bikes that need more attention than others. We'll use the bike ID as a metric for this part of the analysis and create a packed bubbles visualization.

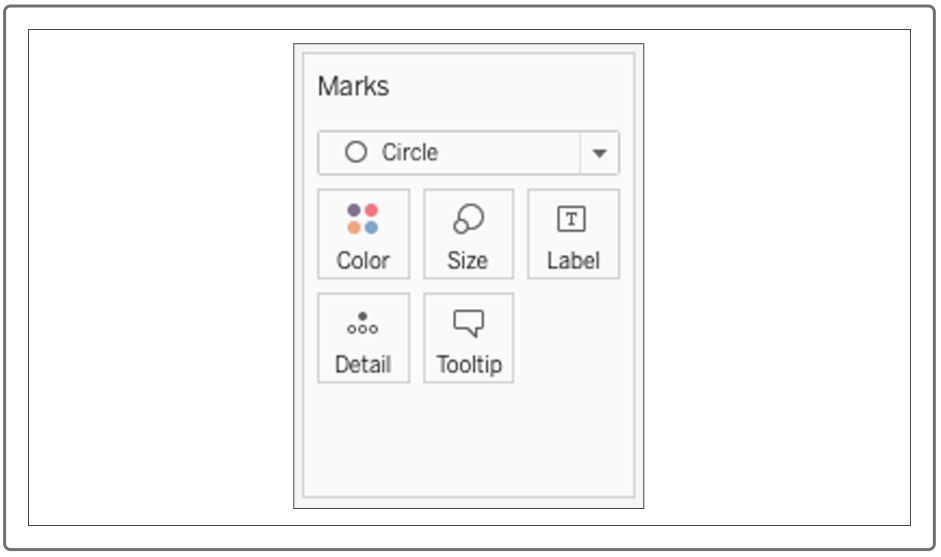
How Variable Is Bike Utilization?

Begin by creating a new worksheet named Bike Utilization. Here's what your workspace will look like after creating the worksheet:

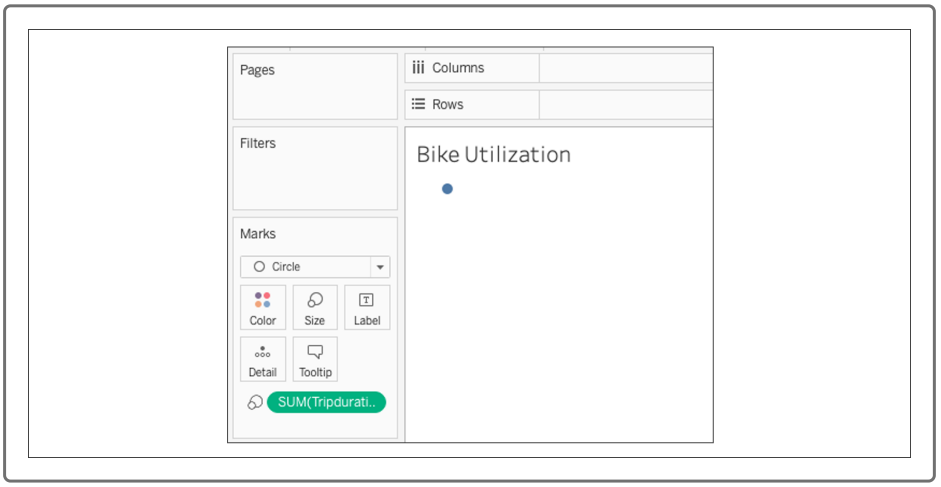


Next, identify the measures and dimensions needed to create the packed bubbles visualization: Tripduration and Bikeid. These will allow us to view the total usage time per bike, as well as which bikes are used the most frequently, which will give us insight into which bikes may need repairs.

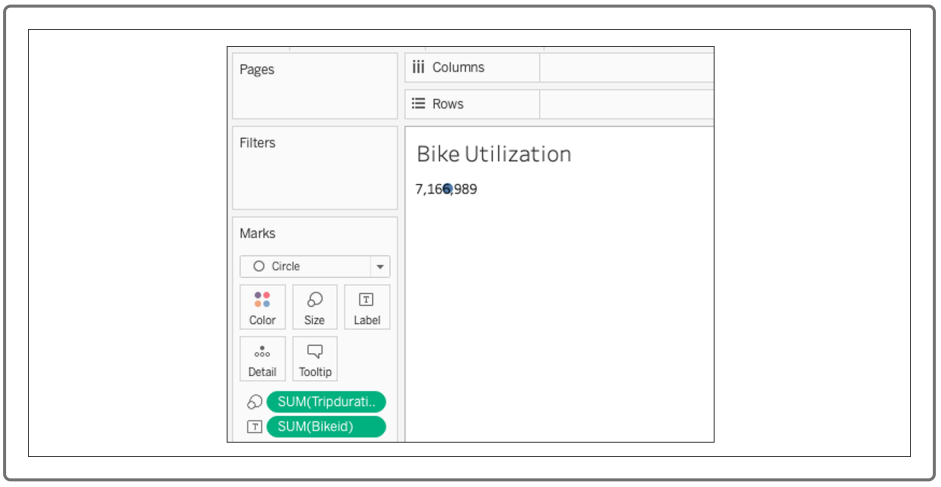
Go to the dropdown menu in the Marks section and select Circle, as shown in the following image:



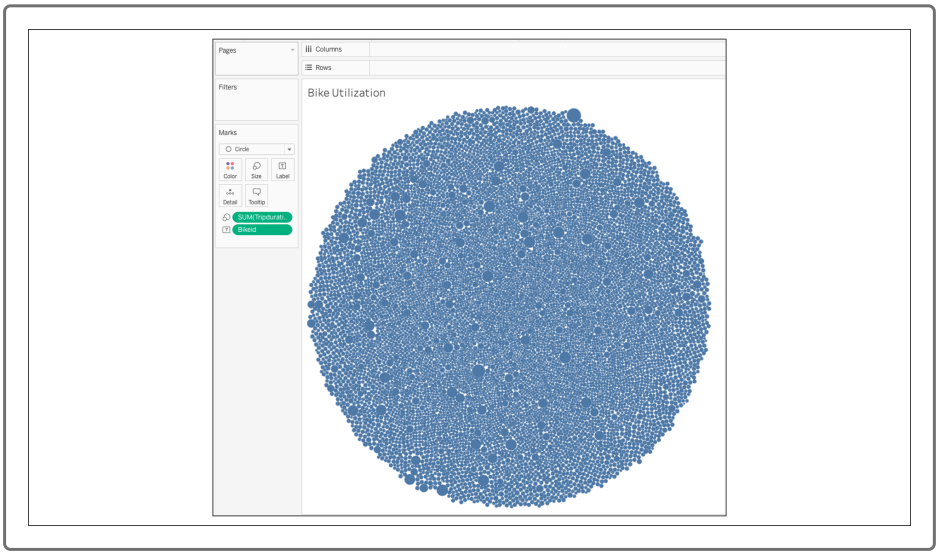
Next, drag the Tripduration measure into the Size mark, so that your workspace looks like this:



Then drag the `Bikeid` into the Text mark:



You may notice that the plot doesn't look quite right. There is only one point in the visualization, which is not what we want. To fix it, change the `Bikeid` to a dimension. Now the plot will look like the following:



Nice work! The bubbles in this plot show the bike utilization levels. If a bike has a higher utilization level, it will be a larger bubble. Feel free to change the colors to make the more utilized bikes stand out more.

Now that we've got our bike utilization by `Bikeid`, we can start to piece together some of the questions that we've answered. Let's dive deeper into this.