

5.3.4 Get the Average Number of Drivers for Each City Type

With the number of rides and the average fare for each city type, you can create a simple scatter, but Omar said that V. Isualize wants to see how the rides and fare data stack are affected by the average number of drivers for each city type. This will help V. Isualize make key decisions about where resources and support are needed.

The last data point we need for our bubble chart is the average number of drivers for each city in the urban, suburban, and rural cities.

To get the average number of drivers for each city in the urban, suburban, and rural cities, we can use the `groupby()` function and get the `mean()` of the `driver_count` column.

Add the following code to a new cell and run the cell.

```
# Get the average number of drivers for each urban city.
urban_driver_count = urban_cities_df.groupby(["city"]).mean()["driver_count"]
urban_driver_count.head()
```

After running the cell, the output will show a Series with the average number of drivers for each urban city, as shown in the following image.

```
urban_driver_count.head()
```

city	
Amandaburgh	12.0
Barajasview	26.0
Carriemouth	52.0
Christopherfurt	41.0
Deanville	49.0

Name: driver_count, dtype: float64

We can repurpose our code and change the variables to calculate the average number of drivers for suburban and rural cities.

Add the following code to a new cell and run the cell.

```
# Get the average number of drivers for each city for the suburban and rural
suburban_driver_count = suburban_cities_df.groupby(["city"]).mean()["driver_
rural_driver_count = rural_cities_df.groupby(["city"]).mean()["driver_count"
```

Now we have all our data and can begin to create our bubble chart!