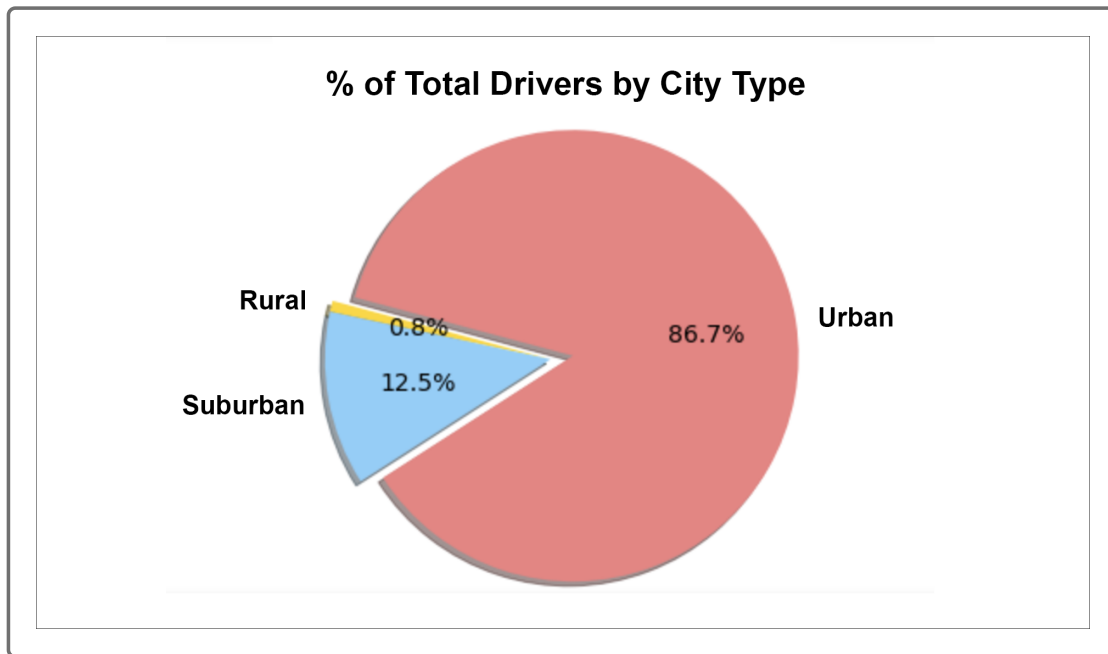## 5.7.1    Calculate Driver Percentages

**One** final chart. That's it. Omar knows you are tired of creating pie charts, but like the last one all you have to do is reuse the code and change a variable. Working fast so you have time to practice your presentation, you crank out percentage of total drivers by city type.

The final pie chart will be the percentage of the total drivers for each city type, where each pie wedge will be the percentage of total drivers. The final pie chart should look similar to this:

## % of Total Drivers by City Type



To create this pie chart, we need to do the following:

- Get the total number of drivers for each city type.

- Get the total drivers for all the city types.

- Calculate the percentage of the total drivers for each city type.

We will calculate the `driver_percents` like we calculated the `type_percents` and the `ride_percents`.

1. Use the `groupby()` function on the `city_data_df` DataFrame and group by the "type" of city column.

2. Apply the `sum()` function on the "driver_count" column to get the Series with the total number of drivers for each city type.

3. Get the total number of drivers using the `sum()` function on the "driver_count" column on the `city_data_df` DataFrame.

4. Divide the Series for the total number of drivers for each city type by the number of total drivers and multiply by 100.

Add the following code to a new cell:

```
# Calculate the percentage of drivers for each city type.
driver_percents = 100 *
city_data_df.groupby(["type"]).sum()["driver_count"] /
city_data_df["driver_count"].sum()
driver_percents
```

When you run the cell, the output of the code will be the following percentages:

```
type
Rural          2.623613
Suburban      16.481668
Urban         80.894719
Name: driver_count, dtype: float64
```

Now we are ready to create our pie chart!