MATPLOTLIB – HOMEWORK

DIVYA TV

*** AVERAGE FARE ($) PER CITY**

```
AVERAGE FARE IN RURAL= TYPE RURAL 34.62344
AVERAGE FARE IN URBAN= TYPE URBAN 24.525772
AVERAGE FARE IN SUBURBAN= TYPE SUBURBAN 30.970128
```

Conclusion 1: Rural cities have considerably higher ride fares than urban and higher than suburban cities. The number of drivers available in the city affects the ride fares.

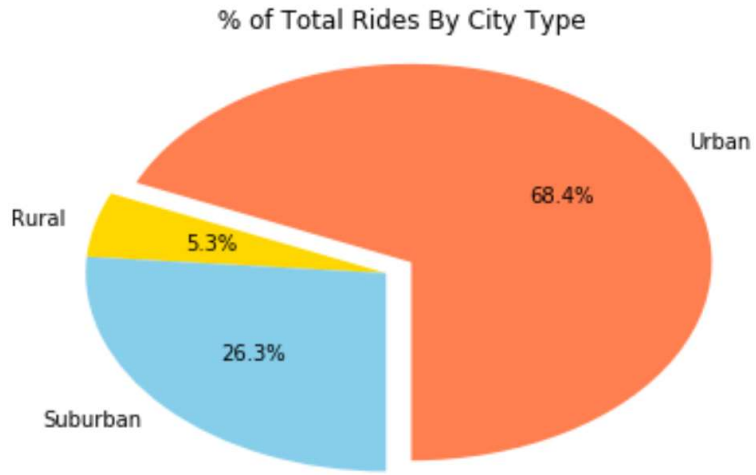
```
print("Average fare in Rural=", rural_data.groupby(['type'])['fare'].mean())

print("Average fare in Urban=", urban_data.groupby(['type'])['fare'].mean())

print("Average fare in Suburban=", suburban_data.groupby(['type'])['fare'].mean())
```

*** TOTAL NUMBER OF RIDES PER CITY**

```
RIDE_BY_URBAN= 1625
RIDE_BY_RURAL= 125
RIDE_BY_SUBURBAN= 625
```

Conclusion 2: Rural cities have lower ride counts. The number of drivers in rural areas affect the number of rides. Also the population in the rural city affect the number of drivers available.

```
# Save Figure
plt.savefig("Divya_pie_totalpercentage_rides.jpg", dpi=600, transparent=False )
```



* **TOTAL NUMBER OF DRIVERS PER CITY**

Conclusion 3: Urban cities have considerably more number of drivers than in rural cities.

```
Urban driver count= 2405
Suburban driver count= 490
Rural driver count= 78
```