Question 2:
Intent:
We would like you to learn the basics of python and data science to load a dataset, read it and perform some operations to find multiple mathematical metrics such as average, maximum, minimum and such.

Here is a dataset for autos.
https://drive.google.com/file/d/1QP21K5tiJAjt5NA7W2FxSe9Wam9-tIcQ/view?usp=sharing

Flow:

1. Download this dataset.
2. Write basic python script to load csv and read it as dataframe
3. Use the dataframe to perform following:
    1. Find Average price of autos (using **price** column of dataset)
    2. Print the list of different possible types of **VehicleType** found in dataset
    3. Calculate and print lowest **yearOfRegistration** and highest **yearOfRegistration**
    4. Find and print standard deviation of column **kilometer**
    5. Draw a bar graph to represent count of different type of column **brand**
    6. Find out which **VehicleType** is sold minimum and maximum
    7. Create a pie chart to represent different types of **gearbox** count

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```
import pandas as pd
df = pd.read_csv('autos.csv')
print(df.head())
```

This piece of code is used to extract the content of the csv file

Find Average price of autos (using **price** column of dataset)

```
print('mean of price column:',autos['price'].mean())
# mean of price column: 17295.14186548524 is the desired solution
# I worked it out on google colabs
```

(Executed on google colabs)

Below is the Snapshot of the code

```python
import pandas as pd
df = pd.read_csv('autos.csv')
print(df.head())
# code to load the csv and read it

#a. find average price of autos
print('mean of price column:',autos['price'].mean())
# mean of price column: 17295.14186548524 is the desired solution
# I worked it out on google colabs


#b.Print the list of different possible types of VehicleType found in dataset
uniqueVehicleType = autos['vehicleType'].unique()
print('unique values of vehicleType column:',uniqueVehicleType)
#Print the list of different possible types of VehicleType found in dataset

#c.Calculate and print lowest yearOfRegistration  and highest
yearOfRegistration
min_yearOfRegistration = autos['yearOfRegistration'].min()
max_yearOfRegistration = autos['yearOfRegistration'].max()
print('min:',min_yearOfRegistration)
print('max:',max_yearOfRegistration)
# min: 1000
# max: 9999

#d.Find and print standard deviation of column kilometer
kilometer = autos['kilometer'].std()
print('standars deviation',kilometer)
#gives the standard deviation

#e. I could not get the graph

#f.Find out which VehicleType  is sold minimum and maximum
vehicleType = autos['vehicleType'].min()
vehicleType = autos['vehicleType'].max()
print('min sold',vehicleType)
print('max sold',vehicleType)

#g. cound not plot the graph

#I will certainly try to figure out the falut and plot graph for question (e)
and (G)
```