

# REV-Data Science-Weekly Assignment-1 ----- created by Karthik V



## Assignment Problem on Descriptive Statistics

### Problem:

Problem1:  
computes a summary of statistics using pandas, describe() function for following mtcars data sets given in URL  
data\_URL='https://raw.githubusercontent.com/Learn-With-Karthik/REV-DataScience-Assignment/main/Data/mtcars.csv'

This car data set conatins following Columns details:  
model-car model  
mpg - Miles per Gallon  
cyl - # of cylinders  
disp - displacement, in cubic inches  
hp - horsepower  
drat - driveshaft ratio (don't really KNOW cars, so if you've got questions - you know what to do. :-D  
wt - weight  
qsec - 1/4 mile time; a measure of acceleration  
vs - 'V' or straight - engine shape  
am - transmission; auto or manual  
gear - # of gears  
carb - # of carburetors.

### CODE 1:

```
In [ ]: import pandas as pd
# TO DO Write your code Here
# hint: use read_csv() method , describe() method
```

```
In [4]: import pandas as pd
mtcars= pd.read_csv("https://raw.githubusercontent.com/Learn-With-Karthik/REV-DataScience-Assignment/main/Data/mtcars.csv")
mtcars
```

Out[4]:

	model	mpg	cyl	disp	hp	drat	wt	qsec	vs	am	gear	carb
0	Mazda RX4	21.0	6	160.0	110	3.90	2.620	16.46	0	1	4	4
1	Mazda RX4 Wag	21.0	6	160.0	110	3.90	2.875	17.02	0	1	4	4
2	Datsun 710	22.8	4	108.0	93	3.85	2.320	18.61	1	1	4	1
3	Hornet 4 Drive	21.4	6	258.0	110	3.08	3.215	19.44	1	0	3	1
4	Hornet Sportabout	18.7	8	360.0	175	3.15	3.440	17.02	0	0	3	2
5	Valiant	18.1	6	225.0	105	2.76	3.460	20.22	1	0	3	1
6	Duster 360	14.3	8	360.0	245	3.21	3.570	15.84	0	0	3	4
7	Merc 240D	24.4	4	146.7	62	3.69	3.190	20.00	1	0	4	2
8	Merc 230	22.8	4	140.8	95	3.92	3.150	22.90	1	0	4	2
9	Merc 280	19.2	6	167.6	123	3.92	3.440	18.30	1	0	4	4
10	Merc 280C	17.8	6	167.6	123	3.92	3.440	18.90	1	0	4	4
11	Merc 450SE	16.4	8	275.8	180	3.07	4.070	17.40	0	0	3	3
12	Merc 450SL	17.3	8	275.8	180	3.07	3.730	17.60	0	0	3	3
13	Merc 450SLC	15.2	8	275.8	180	3.07	3.780	18.00	0	0	3	3
14	Cadillac Fleetwood	10.4	8	472.0	205	2.93	5.250	17.98	0	0	3	4
15	Lincoln Continental	10.4	8	460.0	215	3.00	5.424	17.82	0	0	3	4
16	Chrysler Imperial	14.7	8	440.0	230	3.23	5.345	17.42	0	0	3	4
17	Fiat 128	32.4	4	78.7	66	4.08	2.200	19.47	1	1	4	1
18	Honda Civic	30.4	4	75.7	52	4.93	1.615	18.52	1	1	4	2
19	Toyota Corolla	33.9	4	71.1	65	4.22	1.835	19.90	1	1	4	1
20	Toyota Corona	21.5	4	120.1	97	3.70	2.465	20.01	1	0	3	1
21	Dodge Challenger	15.5	8	318.0	150	2.76	3.520	16.87	0	0	3	2
22	AMC Javelin	15.2	8	304.0	150	3.15	3.435	17.30	0	0	3	2
23	Camaro Z28	13.3	8	350.0	245	3.73	3.840	15.41	0	0	3	4
24	Pontiac Firebird	19.2	8	400.0	175	3.08	3.845	17.05	0	0	3	2
25	Fiat X1-9	27.3	4	79.0	66	4.08	1.935	18.90	1	1	4	1
26	Porsche 914-2	26.0	4	120.3	91	4.43	2.140	16.70	0	1	5	2
27	Lotus Europa	30.4	4	95.1	113	3.77	1.513	16.90	1	1	5	2
28	Ford Pantera L	15.8	8	351.0	264	4.22	3.170	14.50	0	1	5	4
29	Ferrari Dino	19.7	6	145.0	175	3.62	2.770	15.50	0	1	5	6
30	Maserati Bora	15.0	8	301.0	335	3.54	3.570	14.60	0	1	5	8
31	Volvo 142E	21.4	4	121.0	109	4.11	2.780	18.60	1	1	4	2

Question2:  
find the mean, median,mode for mpg - Miles per Gallon coloumn in the given data set

### CODE2:

```
In [ ]: # TO DO Write Your Code Here
# hint use dataframe_name[[column_name]] to get particular coloumn data
```

Question 3:  
find the range, Variance, standard deviation, IQR for hp - horsepower coloumn in the given data set

### CODE3:

```
In [ ]: # TO DO Write Your Code Here
# hint use dataframe_name[[column_name]] to get particular coloumn data
```

Question 4:  
find the frequency/mode of the car model

### CODE4:

```
In [ ]: # TO DO Write Your Code Here
# hint use dataframe_name[[column_name]] to get particular coloumn data
```