

```
In [1]: import pandas as pd
import seaborn as sns
data=pd.read_csv('cars_data.csv')
cars_data=pd.DataFrame(data)
print(cars_data)
```

	Make	Model	Nickname	Car	Gender	Buyer	Gender	Buyer	Age	\
0	Suzuki	Vitara	Philippine		Female		Female		51	
1	Honda	S2000	Henrik		Male		Male		30	
2	BMW	Z4	Lebbie		Male		Female		54	
3	Toyota	Tacoma	Jefferey		Female		Male		68	
4	Ford	Festiva	Glendon		Female		Male		70	
...	
9995	Mazda	Tribute	Cooper		Male		Male		44	
9996	GMC	Sierra 2500	Dud		Male		Male		40	
9997	Mercury	Mariner	Chariot		Male		Male		37	
9998	Daewoo	Leganza	Dynah		Female		Female		21	
9999	Toyota	Sequoia	Zedekiah		Female		Male		21	

	Buzzword	Country	City	Dealer	Latitude	\
0	User-friendly	Belgium	Antwerpen		51.247239	
1	analyzing	China	Jinhu		33.025433	
2	software	China	Gemo		30.916207	
3	monitoring	Portugal	Queluz de Baixo		38.745168	
4	Sharable	Latvia	Jaunpils		56.729980	
...	
9995	hardware	Pakistan	Chishtian Mandi		29.919386	
9996	Enhanced	Costa Rica	Angeles		10.075000	
9997	monitoring	Poland	Dabrowice		52.311923	
9998	cohesive	Philippines	Villasis		15.901640	
9999	analyzing	Philippines	Basud		14.048167	

	Dealer	Longitude	Color	New Car	Purchase Date	Sale Price	Discount	\
0		4.440346	Yellow	False	19/07/2009	54806.14	0.2467	
1		119.020584	Crimson	False	26/10/2015	51826.30	0.3147	
2		121.677640	Khaki	False	28/03/2010	82929.14	0.5414	
3		-9.267087	Puce	False	07/05/2008	56928.66	0.0850	
4		23.016588	Yellow	False	01/06/2008	77201.26	0.1642	
...		
9995		73.074787	Pink	False	05/01/2020	58580.65	0.1611	
9996		-84.241523	Puce	False	28/12/2005	75229.74	0.2691	
9997		19.084965	Blue	False	08/03/2013	34755.44	0.2493	
9998		120.587828	Teal	True	21/02/2008	98725.42	0.4654	
9999		122.955697	Pink	False	16/12/2017	96769.78	0.5446	

	Resell Price	5-yr Depreciation	Top Speed	0-60 Time
0	33858.32	0.13	200.9	11.5
1	2989.28	0.02	158.5	8.8
2	35049.16	0.24	149.5	14.4
3	8236.15	0.20	153.3	11.5
4	32765.76	0.18	122.0	14.9
...
9995	42640.82	0.14	245.8	8.0
9996	21115.58	0.11	147.4	12.3
9997	2731.25	0.12	198.1	11.8
9998	18718.58	0.04	206.7	12.2
9999	4545.95	0.07	242.1	3.2

[10000 rows x 20 columns]

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In [ ]: #null values
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In [2]: cars_data.isnull().values.any()
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Out[2]: False

```
In [ ]: #bar graph
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In [5]: import seaborn as sns
import warnings
warnings.filterwarnings("ignore")
sns.countplot(cars_data['Buyer Gender'])
```

Out[5]: <AxesSubplot: xlabel='Buyer Gender', ylabel='count'>



```
In [ ]: #top 5 cars
```

```
In [12]: import pandas as pd
data=pd.read_csv('cars_data.csv')
cars_data=pd.DataFrame(data)

sale_price=cars_data['Sale Price']
sale_price_sorted=sale_price.sort_values(ascending=False)
top_index=sale_price_sorted[0:5].index
pd.DataFrame({'Make':list(cars_data['Make'][top_index]),
              'Model':list(cars_data['Model'][top_index]),
              'Sale Price':list(cars_data['Sale Price'][top_index])}, index=[1,2,3,4,5])
```

Out[12]:

	Make	Model	Sale Price
1	Volkswagen	Jetta III	99997.65
2	Audi	A6	99991.91
3	Lexus	LX	99983.38
4	Mazda	MX-6	99978.17
5	Lexus	ES	99973.44

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In [ ]: #least 5 cars
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```
In [15]: sale_price=cars_data['Resell Price']
sale_price_sorted=sale_price.sort_values(ascending=True)
least_index=sale_price_sorted[0:5].index
pd.DataFrame({'Make':list(cars_data['Make'][least_index]),
              'Model':list(cars_data['Model'][least_index]),
              'Resell Price':list(cars_data['Sale Price'][least_index])}, index=[1,2,3,4,5])
```

Out[15]:

	Make	Model	Resell Price
1	Chevrolet	1500	49909.44
2	GMC	Savana 1500	80084.82
3	Jaguar	XF	24124.99
4	Mitsubishi	3000GT	88195.95
5	Infiniti	G37	77791.65

```
In [ ]:
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