


```
In [1]: import pandas as pd
pd.set_option("display.max_columns",None)
df=pd.read_csv("E:\\KVR-PANDAS-EXCLUSIVE\\GOOGLE PLAY STORE PROJECT\\googleplay
print(df)
```

	App	Category
\		
0	Photo Editor & Candy Camera & Grid & ScrapBook	ART_AND_DESIGN
1	Coloring book moana	ART_AND_DESIGN
2	U Launcher Lite - FREE Live Cool Themes, Hide ...	ART_AND_DESIGN
3	Sketch - Draw & Paint	ART_AND_DESIGN
4	Pixel Draw - Number Art Coloring Book	ART_AND_DESIGN
...
10836	Sya9a Maroc - FR	FAMILY
10837	Fr. Mike Schmitz Audio Teachings	FAMILY
10838	Parkinson Exercices FR	MEDICAL
10839	The SCP Foundation DB fr nn5n	BOOKS_AND_REFERENCE
10840	iHoroscope - 2018 Daily Horoscope & Astrology	LIFESTYLE

	Rating	Reviews	Size	Installs	Type	Price	\
0	4.1	159	19M	10,000+	Free	0	
1	3.9	967	14M	500,000+	Free	0	
2	4.7	87510	8.7M	5,000,000+	Free	0	
3	4.5	215644	25M	50,000,000+	Free	0	
4	4.3	967	2.8M	100,000+	Free	0	
...	
10836	4.5	38	53M	5,000+	Free	0	
10837	5.0	4	3.6M	100+	Free	0	
10838	NaN	3	9.5M	1,000+	Free	0	
10839	4.5	114	Varies with device	1,000+	Free	0	
10840	4.5	398307	19M	10,000,000+	Free	0	

	Content Rating	Genres	Last Updated	\
0	Everyone	Art & Design	January 7, 2018	
1	Everyone	Art & Design;Pretend Play	January 15, 2018	
2	Everyone	Art & Design	August 1, 2018	
3	Teen	Art & Design	June 8, 2018	
4	Everyone	Art & Design;Creativity	June 20, 2018	
...	
10836	Everyone	Education	July 25, 2017	
10837	Everyone	Education	July 6, 2018	
10838	Everyone	Medical	January 20, 2017	
10839	Mature 17+	Books & Reference	January 19, 2015	
10840	Everyone	Lifestyle	July 25, 2018	

	Current Ver	Android Ver
0	1.0.0	4.0.3 and up
1	2.0.0	4.0.3 and up
2	1.2.4	4.0.3 and up
3	Varies with device	4.2 and up
4	1.1	4.4 and up
...
10836	1.48	4.1 and up
10837	1.0	4.1 and up
10838	1.0	2.2 and up
10839	Varies with device	Varies with device
10840	Varies with device	Varies with device

[10841 rows x 13 columns]

In [2]: `df.head()`

Out[2]:

	App	Category	Rating	Reviews	Size	Installs	Type	Price	Content Rating	
0	Photo Editor & Candy Camera & Grid & ScrapBook	ART_AND_DESIGN	4.1	159	19M	10,000+	Free	0	Everyone	
1	Coloring book moana	ART_AND_DESIGN	3.9	967	14M	500,000+	Free	0	Everyone	D
2	U Launcher Lite – FREE Live Cool Themes, Hide ...	ART_AND_DESIGN	4.7	87510	8.7M	5,000,000+	Free	0	Everyone	
3	Sketch - Draw & Paint	ART_AND_DESIGN	4.5	215644	25M	50,000,000+	Free	0	Teen	
4	Pixel Draw - Number Art Coloring Book	ART_AND_DESIGN	4.3	967	2.8M	100,000+	Free	0	Everyone	De

In [22]: `#Find the Top 5 App Names having highest Review`
`indices=df["Reviews"].sort_values(ascending=False).head().index`
`df.iloc[indices]["App"]`

Out[22]: 2989 GollerCepte Live Score
 4970 Ad Block REMOVER - NEED ROOT
 2723 SnipSnap Coupon App
 2705 SnipSnap Coupon App
 3079 US Open Tennis Championships 2018
 Name: App, dtype: object

In [23]: `#OR`
`df.loc[indices]["App"]`

Out[23]: 2989 GollerCepte Live Score
 4970 Ad Block REMOVER - NEED ROOT
 2723 SnipSnap Coupon App
 2705 SnipSnap Coupon App
 3079 US Open Tennis Championships 2018
 Name: App, dtype: object

```
In [29]: #15.Find Average Rating of Free and Paid Apps
df.groupby("Type")["Rating"].mean()
```

```
Out[29]: Type
0          19.000000
Free       4.186203
Paid       4.266615
Name: Rating, dtype: float64
```

```
In [35]: #Find Top 5 Apps Having Maximum Installs
df["newInstalls"]=df["Installs"].str.replace(",","")
df["newInstalls"]
```

```
Out[35]: 0          10000+
1          500000+
2          5000000+
3          50000000+
4          100000+
...
10836         5000+
10837          100+
10838          1000+
10839          1000+
10840       10000000+
Name: newInstalls, Length: 10841, dtype: object
```

```
In [36]: df["newInstalls"].str.replace("+","")
```

```
Out[36]: 0          10000
1          500000
2          5000000
3          50000000
4          100000
...
10836         5000
10837          100
10838          1000
10839          1000
10840       10000000
Name: newInstalls, Length: 10841, dtype: object
```

```
In [37]: df["newInstalls"]=df["newInstalls"].str.replace("+","")
df["newInstalls"]
```

```
Out[37]: 0          10000
1         500000
2        5000000
3       50000000
4        100000
...
10836         5000
10837         100
10838        1000
10839        1000
10840       10000000
Name: newInstalls, Length: 10841, dtype: object
```

```
In [39]: df["newInstalls"].dtype
```

```
Out[39]: dtype('O')
```

```
In [42]: df.loc[df["newInstalls"]=="Free"]
```

```
Out[42]:
```

	App	Category	Rating	Reviews	Size	Installs	Type	Price	Content Rating	Genre	
10472	Life Made WI-Fi Touchscreen Photo Frame		1.9	19.0	3.0M	1,000+	Free	0	Everyone	NaN	Februa 11, 20...

```
In [44]: df["newInstalls"]=df["newInstalls"].str.replace("Free","0")
```

```
In [47]: df["newInstalls"].astype(int)
```

```
Out[47]: 0          10000
1         500000
2        5000000
3       50000000
4        100000
...
10836         5000
10837         100
10838        1000
10839        1000
10840       10000000
Name: newInstalls, Length: 10841, dtype: int32
```

```
In [48]: df["newInstalls"]=df["newInstalls"].astype(int)
```

```
In [49]: df["newInstalls"].dtype
```

```
Out[49]: dtype('int32')
```

```
In [51]: df["newInstalls"].sort_values().tail()
```

```
Out[51]: 865      1000000000
3565      1000000000
2554      1000000000
3234      1000000000
4096      1000000000
Name: newInstalls, dtype: int32
```

```
In [52]: indices=df["newInstalls"].sort_values().tail().index
print(indices)
```

```
Index([865, 3565, 2554, 3234, 4096], dtype='int64')
```

```
In [54]: df.iloc[indices]['App']
```

```
Out[54]: 865      Google Play Games
3565      Google Drive
2554      Google+
3234      Google
4096      Gmail
Name: App, dtype: object
```

```
In [57]: df.loc[indices][['App',"Installs"]]
```

```
Out[57]:
```

	App	Installs
865	Google Play Games	1,000,000,000+
3565	Google Drive	1,000,000,000+
2554	Google+	1,000,000,000+
3234	Google	1,000,000,000+
4096	Gmail	1,000,000,000+

```
In [ ]:
```