Portfolio assignment 6

60 min: Perform a univariate analysis on at least 2 columns with categorical data and on at least 2 columns with numerical data in the dataset that you chose in portfolio assignment 4. Commit the Notebook to your portfolio when you're finished.

In [1]:
```
import pandas as pd
import seaborn as sns
```

In [2]:
```
steam = pd.read_csv(r"steam_games.csv")
steam.head()
```

Out[2]:

		url	types	name	desc_snippet	recent_revie
0	https://store.steampowered.com/app/379720/DOOM/	app	DOOM	Now includes all three premium DLC packs (Unto...	Very Posit (554),- 899 the 554 u re	
1	https://store.steampowered.com/app/578080/PLAY...	app	PLAYERUNKNOWN'S BATTLEGROUNDS	PLAYERUNKNOWN'S BATTLEGROUNDS is a battle roya...	Mixed,(6,21 49% of 6,214 u review	
2	https://store.steampowered.com/app/637090/BATT...	app	BATTLETECH	Take command of your own mercenary outfit of '...	Mixed,(16 54% of the user review	
3	https://store.steampowered.com/app/221100/DayZ/	app	DayZ	The post-soviet country of Chernarus is struck...	Mixed,(93 57% of the user review	
4	https://store.steampowered.com/app/8500/EVE_On...	app	EVE Online	EVE Online is a community-driven spaceship MMO...	Mixed,(28 54% of the user review	

Top 10 most rated games

This doesn't mean top rated, just the games with the most ratings.

In [3]:
```
steam[['name','all_reviews']].sort_values(by='all_reviews', ascending=False).head(10)
```

Out[3]:

	name	all_reviews
3642	The Heiress	Very Positive,(998),- 86% of the 998 user revi...
8917	Don't Starve: Hamlet	Very Positive,(996),- 89% of the 996 user revi...
1270	Command & Conquer: Red Alert 3 - Uprising	Very Positive,(995),- 85% of the 995 user revi...
8501	Zero-K	Very Positive,(994),- 90% of the 994 user revi...
9322	MUSYNX	Very Positive,(994),- 82% of the 994 user revi...
3741	Full Throttle Remastered	Very Positive,(992),- 93% of the 992 user revi...
1301	Immortal Redneck	Very Positive,(992),- 92% of the 992 user revi...
2023	Turok 2: Seeds of Evil	Very Positive,(990),- 94% of the 990 user revi...
8553	SUPER FLAIL	Very Positive,(99),- 92% of the 99 user review...
8053	Towards The Pantheon: Escaping Eternity	Very Positive,(99),- 90% of the 99 user review...

Top 10 most recent games

In [4]:
```
steam.release_date.dtypes
```

Out[4]:
```
dtype('O')
```

We're going to convert the Object column to datetime64

In [5]:
```
recentSteam = steam
```

In [6]:
```
recentSteam.release_date = pd.to_datetime(steam.release_date, errors='coerce').dropna
```

In [7]:
```
recentSteam[['name','release_date']].sort_values(by='release_date',ascending=False).h
```

Out[7]:

	name	release_date
38508	Zoroastra	2025-04-03
5436	Telecube Nightmare	2023-12-25
31581	Magical Star Pillars Anniversary Edition	2022-12-31
31275	8-in-1 IQ Scale Bundle - Quirky Jerk (OST)	2022-07-25
35215	WAIFU WARS ONLINE	2022-02-02
31356	Captain's Tail	2022-01-01
33776	DEEP 8	2021-08-04
33404	KingOfEgyptGX	2021-06-01
33621	Mongrel	2021-04-01
36842	GreenFlame	2021-01-01

So it seems some upcoming games slipped into here, we can filter those.

In [8]:
```
from datetime import datetime
recentSteam['release_date'].loc['1970-01-01':datetime.today().strftime('%Y-%m-%d')].d
```

Out[8]:
```
19701   2013-04-04
19703   2013-07-31
19704   2015-08-28
19705   2015-07-10
19706   2016-01-19
           ...
20205   2018-03-08
20206   2016-12-22
20207   2017-01-10
20208   2017-01-30
20209   2016-12-08
Name: release_date, Length: 441, dtype: datetime64[ns]
```

So, finally.

In [9]:
```
today = datetime.today().strftime('%Y-%m-%d')
recentSteam['release_date'] = recentSteam['release_date'].loc[recentSteam['release_dat
recentSteam = recentSteam[['name','release_date']].sort_values(by='release_date',asce
recentSteam
```

Out[9]:

	name	release_date
38912	Return to Nangrim	2021-01-01
32095	CHROMATOSE	2021-01-01
36842	GreenFlame	2021-01-01
31466	Star Fighters	2020-12-31
40441	The Ghost of Joe Papp: 101 Ways To Kill Writer...	2020-12-02
...	...	...
3676	Silent Service	1985-01-01
5570	The Castles of Dr. Creep	1984-11-01
8224	Space Ace	1984-04-29
2096	Dragon's Lair	1983-06-19
18229	The Mystery of the Urnog	1981-04-22

36698 rows × 2 columns

Most achievements

In [10]:
```
steam[['name','achievements']].dropna().sort_values('achievements',ascending=False).h
```

Out[10]:

	name	achievements
20589	LOGistICAL	9821.0
12720	Trivia Vault: Movie Trivia	5000.0
24971	Panda Run	5000.0
29201	The Dropping of The Dead	5000.0
5520	USA 2020	5000.0
26996	Ninja Stealth 3	5000.0
5541	Math Problem Challenge	5000.0
10153	Digit Daze	5000.0
17660	Trivia Vault: Auto Racing Trivia	5000.0
25321	Cludbugz's Twisted Magic	5000.0

These kind of results make me doubt the legitimancy of this dataset, but I'll assume this is correct.

So I can't find any categorical data in my dataset, which means i'll get another one.

In [11]:
```
vg = pd.read_csv('vgsales.csv')
vg.head()
```

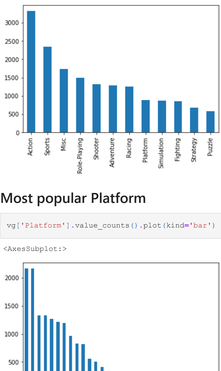
Out[11]:

	Rank	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Globa
0	1	Wii Sports	Wii	2006.0	Sports	Nintendo	41.49	29.02	3.77	8.46	
1	2	Super Mario Bros.	NES	1985.0	Platform	Nintendo	29.08	3.58	6.81	0.77	
2	3	Mario Kart Wii	Wii	2008.0	Racing	Nintendo	15.85	12.88	3.79	3.31	
3	4	Wii Sports Resort	Wii	2009.0	Sports	Nintendo	15.75	11.01	3.28	2.96	
4	5	Pokemon Red/Pokemon Blue	GB	1996.0	Role-Playing	Nintendo	11.27	8.89	10.22	1.00	

Most popular genres

In [12]:
```
vg['Genre'].value_counts().plot(kind='bar')
```

Out[12]:
```
<AxesSubplot:>
```



Most popular Platform

In [13]:
```
vg['Platform'].value_counts().plot(kind='bar')
```

Out[13]:
```
<AxesSubplot:>
```