# MARVEL SUPERHEROES

Presentation by 梁廣廷

# INTRODUCTION



# LIBRARY

streamlit
pandas
matplotlib
seaborn
plotly

## STREAMLIT

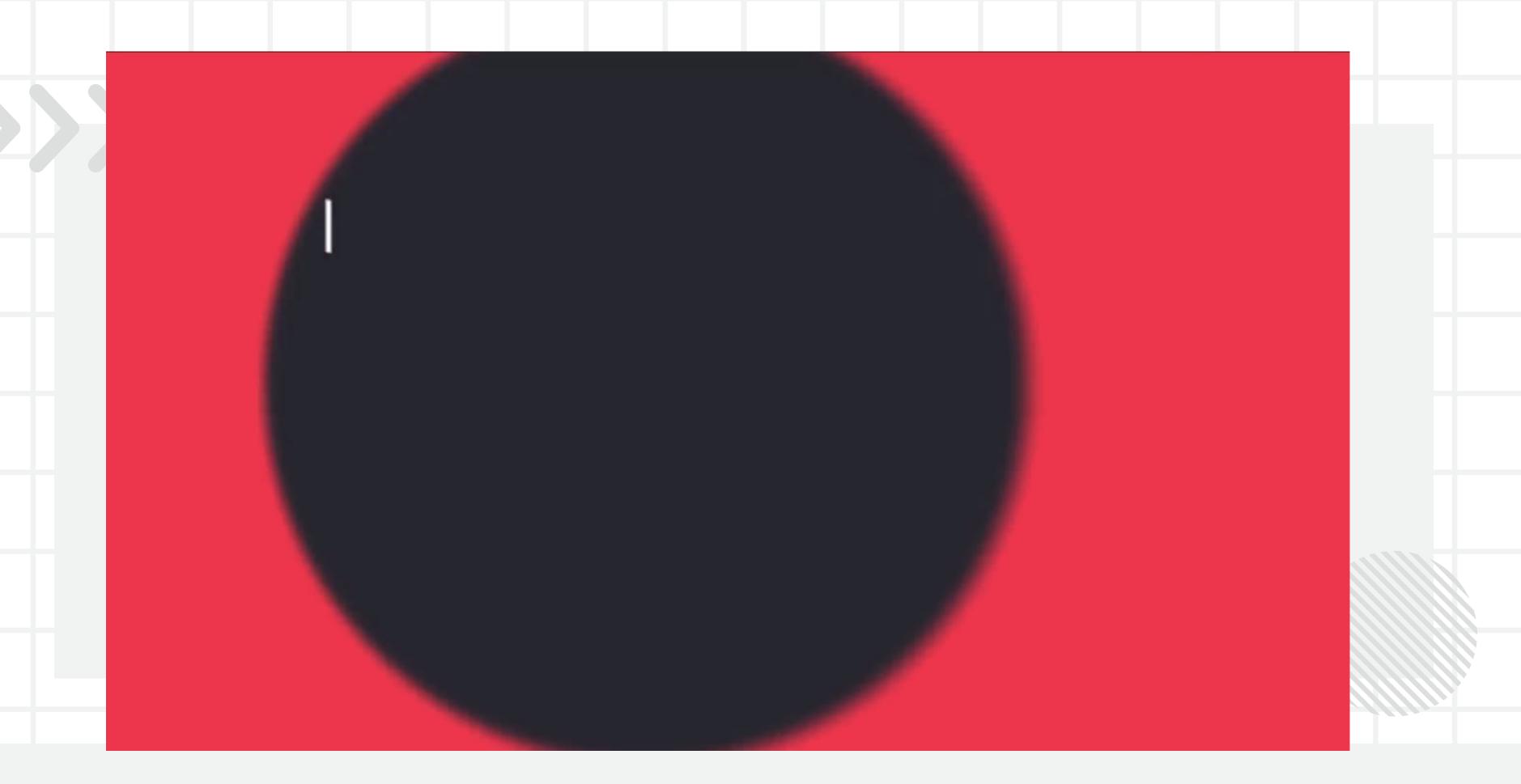
# A faster way to build and share data apps

Streamlit turns data scripts into shareable web apps in minutes.

All in pure Python. No front-end experience required.

Try Streamlit now

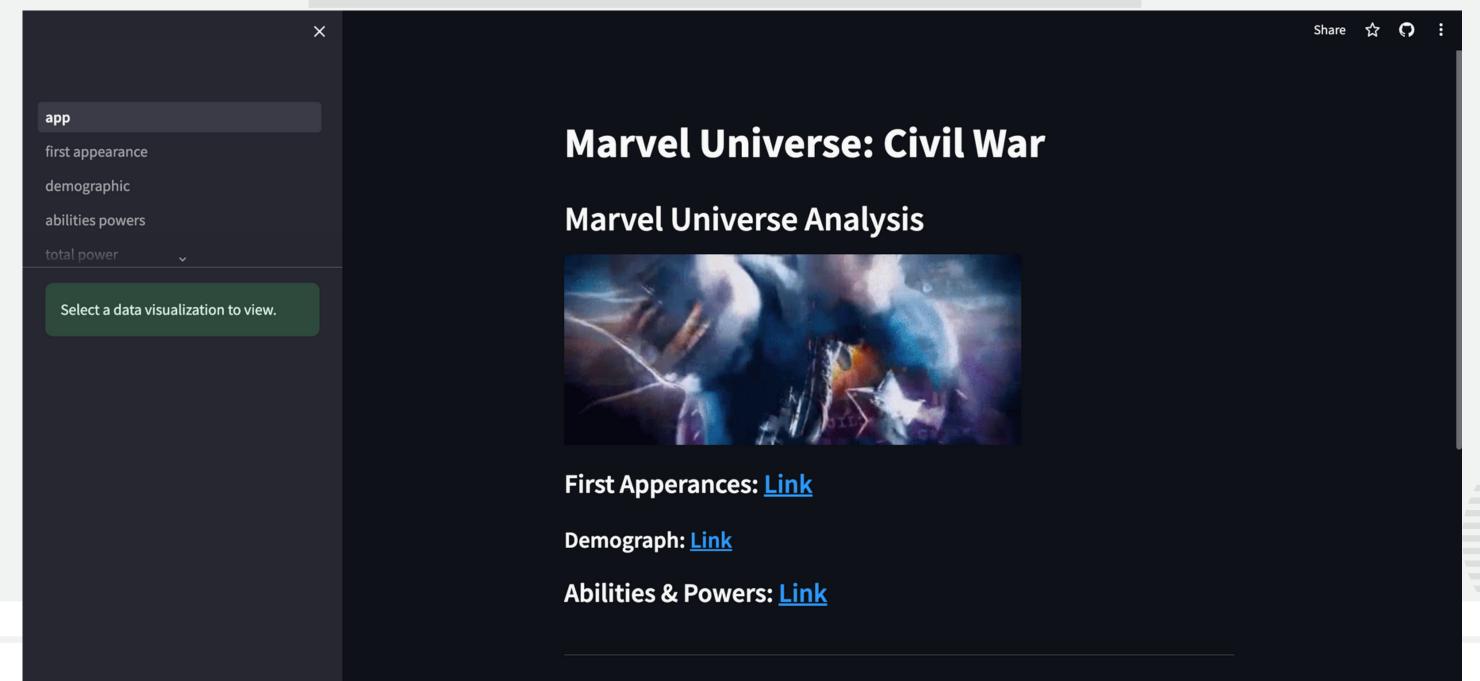
Deploy on Community Cloud (it's free!)



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### DEMO





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### REFERENCES

- **Q STREAMLIT FOR DATA SCIENCE:**CREATE INTERACTIVE DATA APPS IN PYTHON
- Q DOCS.STREAMLIT.IO/
- **Q HARNESSING GITHUB COPILOT WITH PYTHON**

# THANK YOU

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### OUTLINE

- **Q SHOW THE DATASET NAME AND SOURCE**
- **Q COLUMN NAMES DESCRIPTIONS AND RECORDS**
- **Q YOUR QUESTIONS AND CORRESPONDING ANALYSIS PLOTS**
- **Q CONCLUSIONS**

# DATASET NAME AND SOURCE ADDRESS



**Marvel Superheroes** 

https://www.kaggle.com/datasets/dan nielr/marvel-superheroes

# COLUMN NAMES DESCRIPTIONS AND RECORDS

- characters.csv
- charactersToComics.csv
- charcters\_stats.csv
- comics.csv
- marvel\_characters\_info.cs
- marvel\_dc\_characters.csv
- marvel\_dc\_characters.xls>
  - superheroes\_power\_matri

# COLUMN NAMES DESCRIPTIONS AND RECORDS

	aracters_info.d	<b>csv</b> (46.27 kB)				[] >
Detail Comp	oact Column  A Name =	A Alignment =	A Gender =	A EyeColor =	10 of 11 <u>A</u> Race =	columns ∨ <u>A</u> HairColo
0	A-Bomb	good	Male	yellow	Human	No Hair
1	Abe Sapien	good	Male	blue	Icthyo Sapien	No Hair
2	Abin Sur	good	Male	blue	Ungaran	No Hair
3	Abomination	bad	Male	green	Human / Radiation	No Hair
4	Abraxas	bad	Male	blue	Cosmic Entity	Black
5	Absorbing Man	bad	Male	blue	Human	No Hair
6	Adam Monroe	good	Male	blue	-	Blond
7	Adam Strange	good	Male	blue	Human	Blond
8	Agent 13	good	Female	blue	-	Blond
9	Agent Bob	good	Male	brown	Human	Brown
10	Agent Zero	good	Male	_	_	_

nhance the quality of its services and to analyze traffic.

#### **COLUMN NAMES DESCRIPTIONS AND**

charcters_stats.csv (21.93 kB) ★ □ →								
Detail Comp	oact Column  A Alignment =	# Intelligence =	# Strength =	# Speed =	9 of 9 # Durability =	# Power		
3-D Man	good	50	31	43	32	25		
A-Bomb	good	38	100	17	80	17		
Abe Sapien	good	88	14	35	42	35		
Abin Sur	good	50	90	53	64	84		
Abomination	bad	63	80	53	90	55		
Abraxas	bad	88	100	83	99	100		
Adam Monroe	good	63	10	12	100	71		
Adam Strange	good	1	1	1	1	0		
Agent 13	good	1	1	1	1	0		
Agent Bob	good	10	8	13	5	5		
Agent Zero	good	75	28	38	80	72		
Air-Walker	bad	50	85	100	85	100		

### QUESTIONS

**Q YEAR OF APPEARANCE** 

Q ABILITIES & POWERS

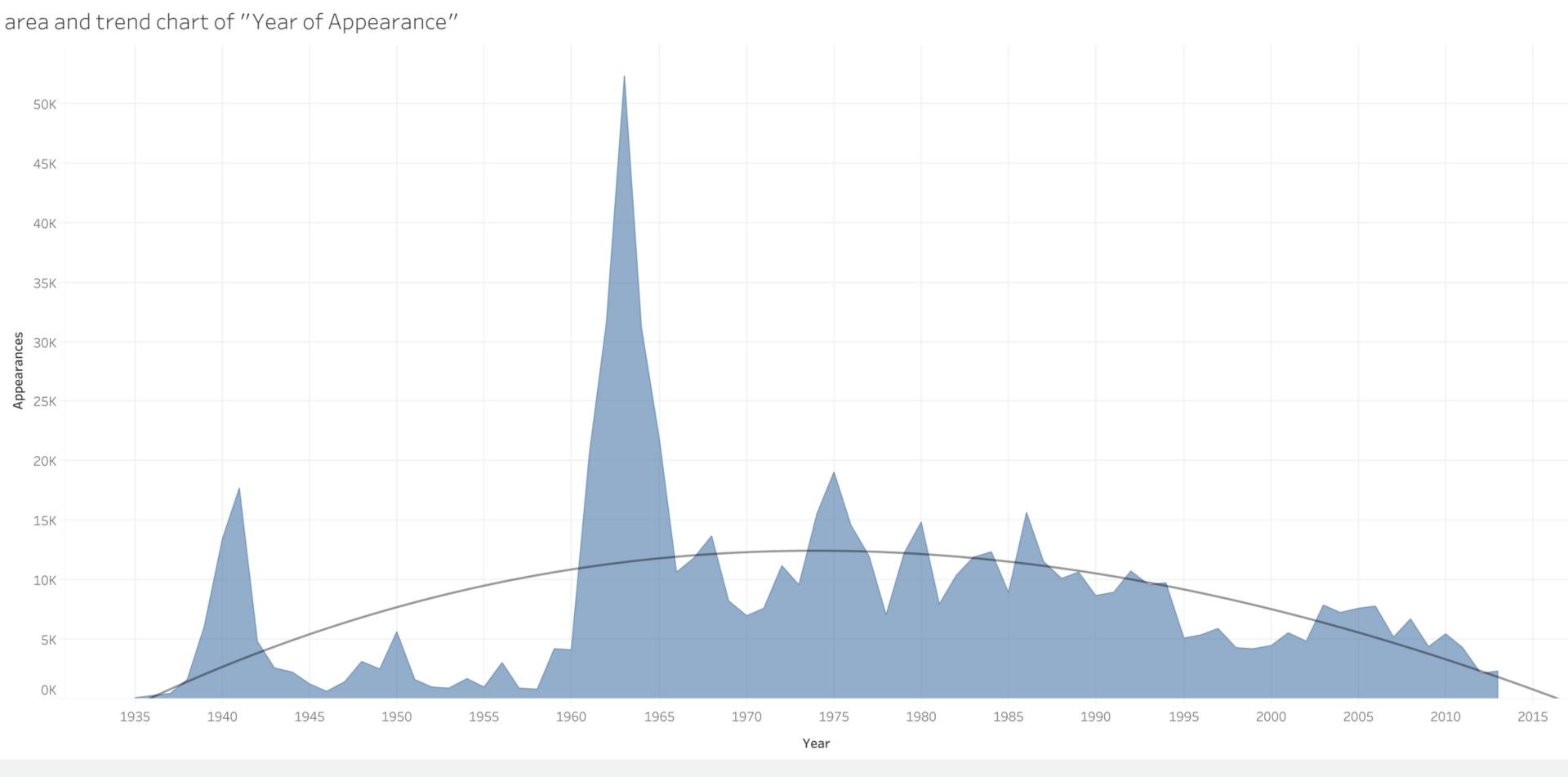
**Q ALIGNMENT** 

**Q THE POWERGRID COMPARISON** 

**Q GENDER VS. ALIGNMENT** 

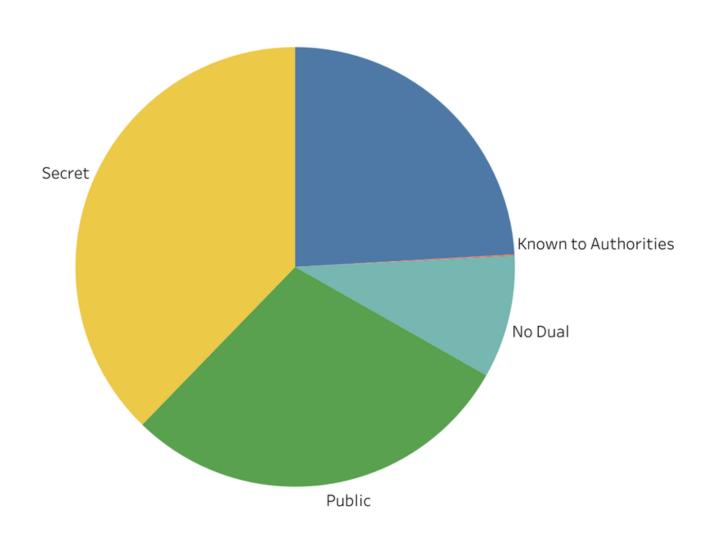
**Q TOTAL POWER OF THE TEAM**BY CHARACTERS

- Q IDENTITY VS. ALIGNMENT
- **Q** COMPARISON OF CHARACTERS
- Q SCATTER OF APPEARANCE AND GENDER

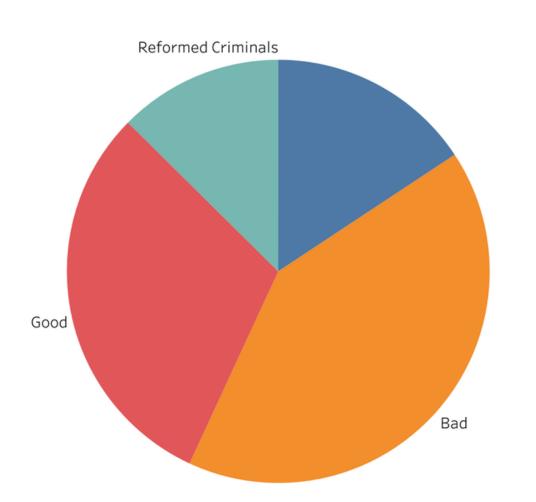


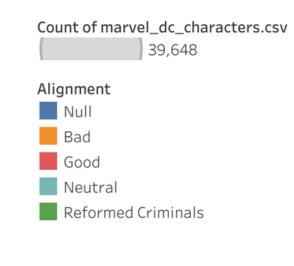
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pie chart of Identity

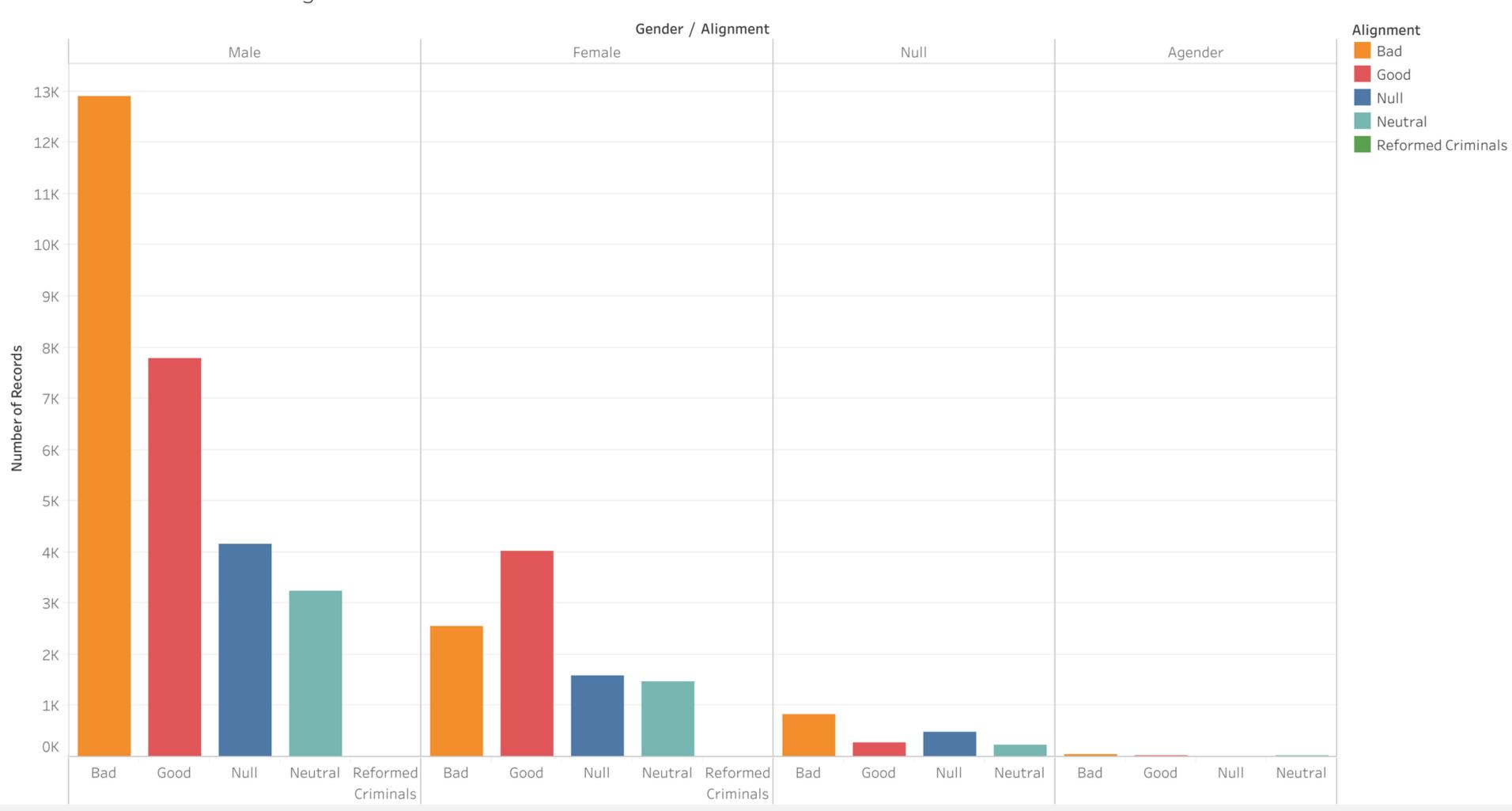


pie chart of alignment

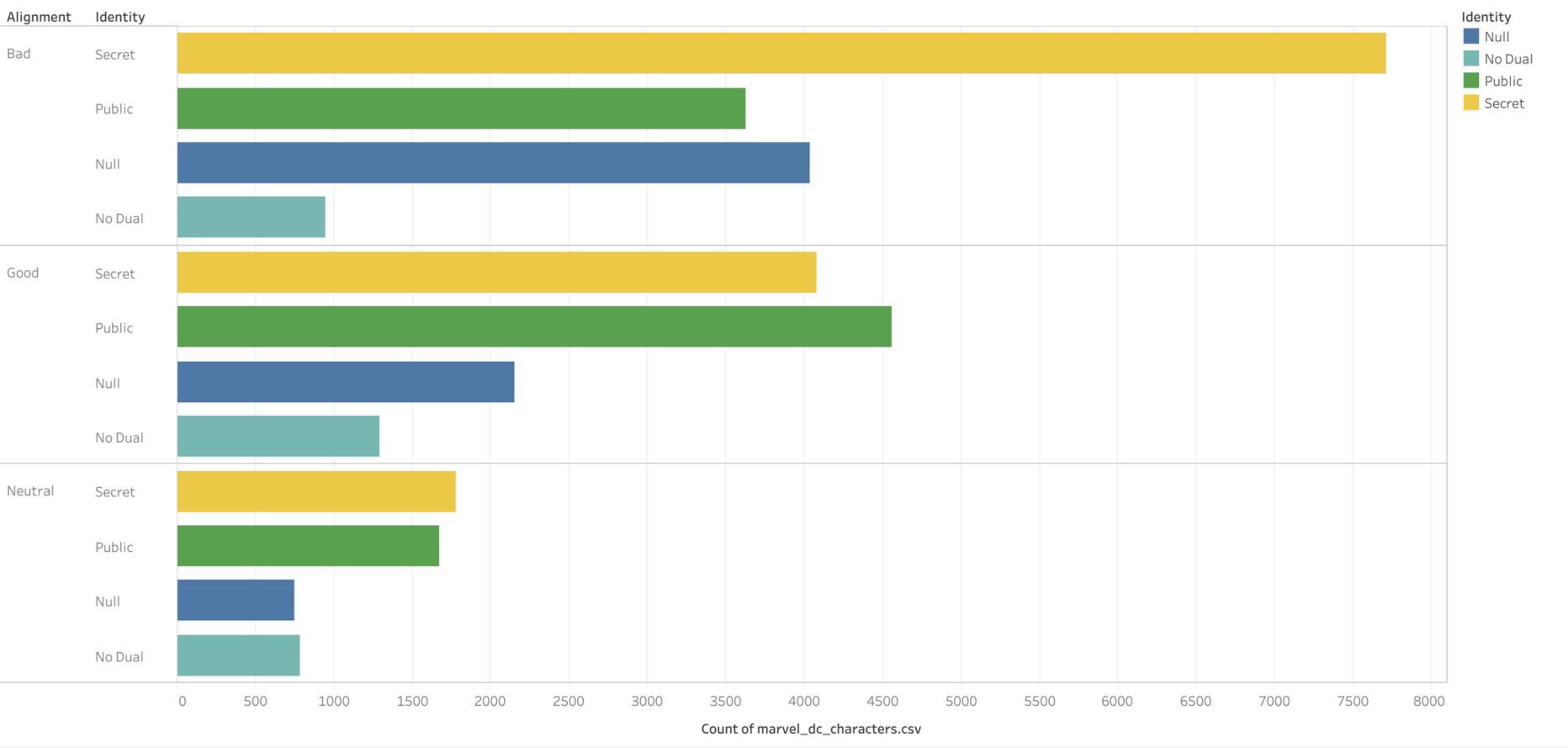




bar chart of "Gender vs. Alignment"

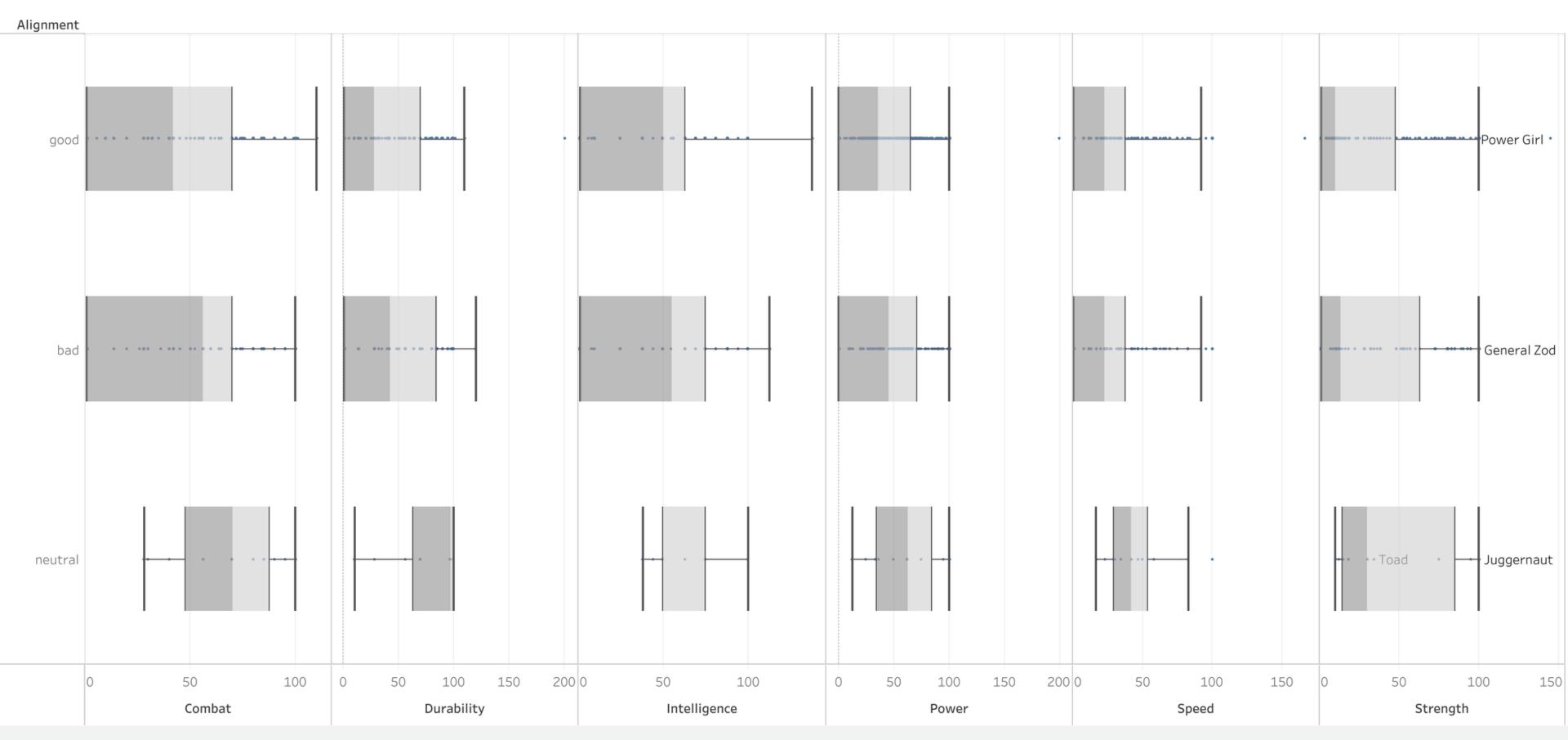


#### bar chart of Identity vs. Alignment



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#### Abilities box

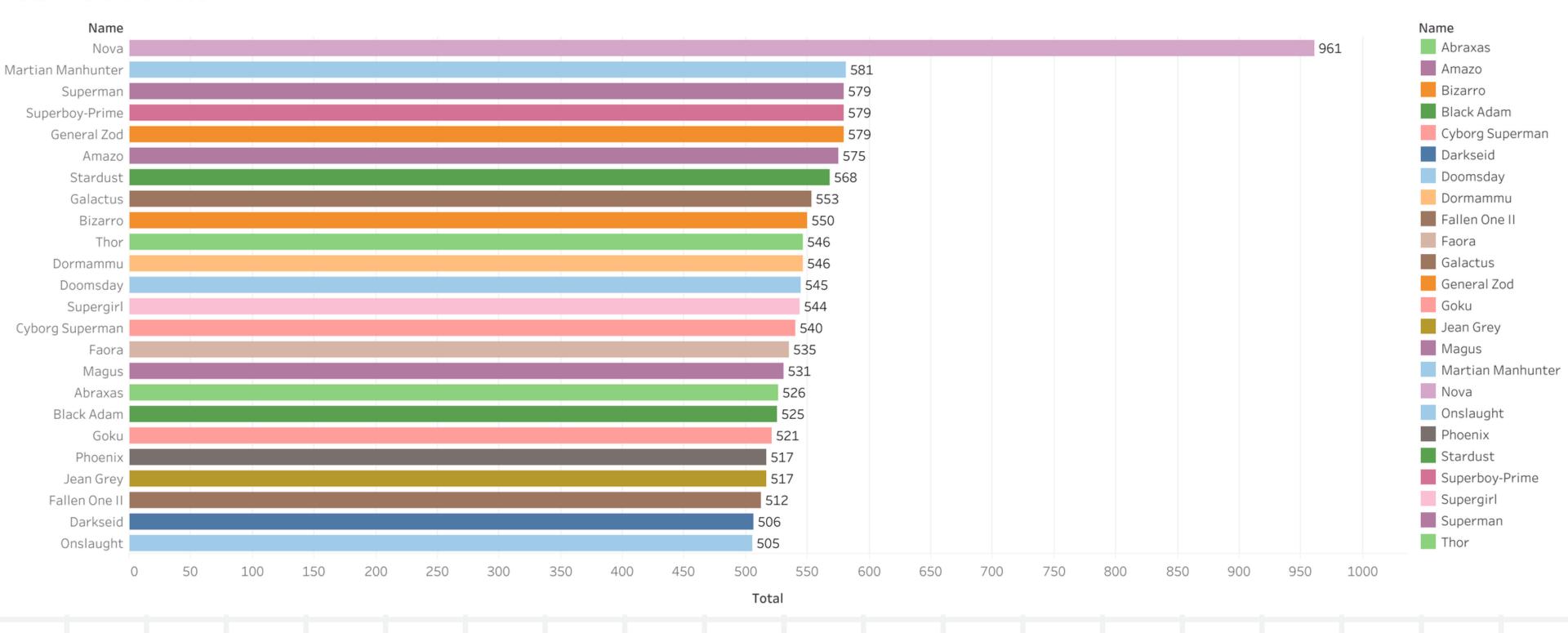


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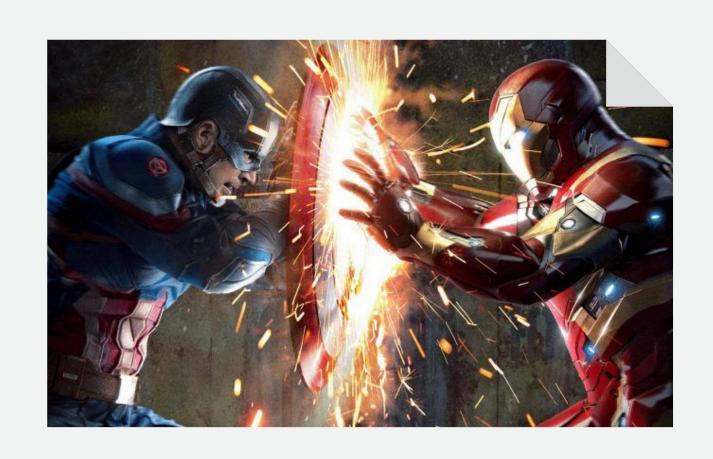
# YOUR QUESTIONS AND CORRESPONDING ANALYSIS PLOTS

# **Winners of Combat**

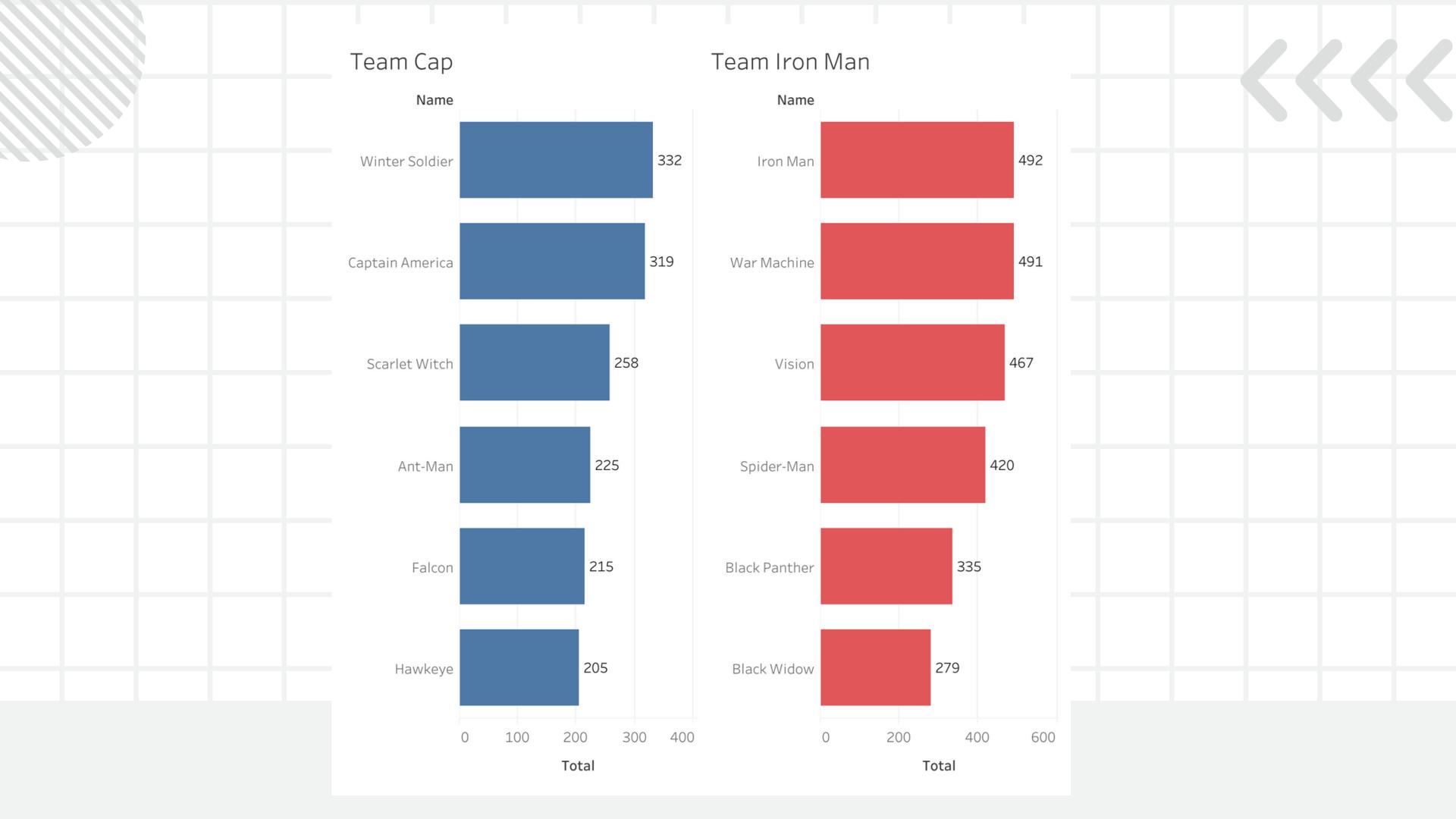
#### Total more than 500

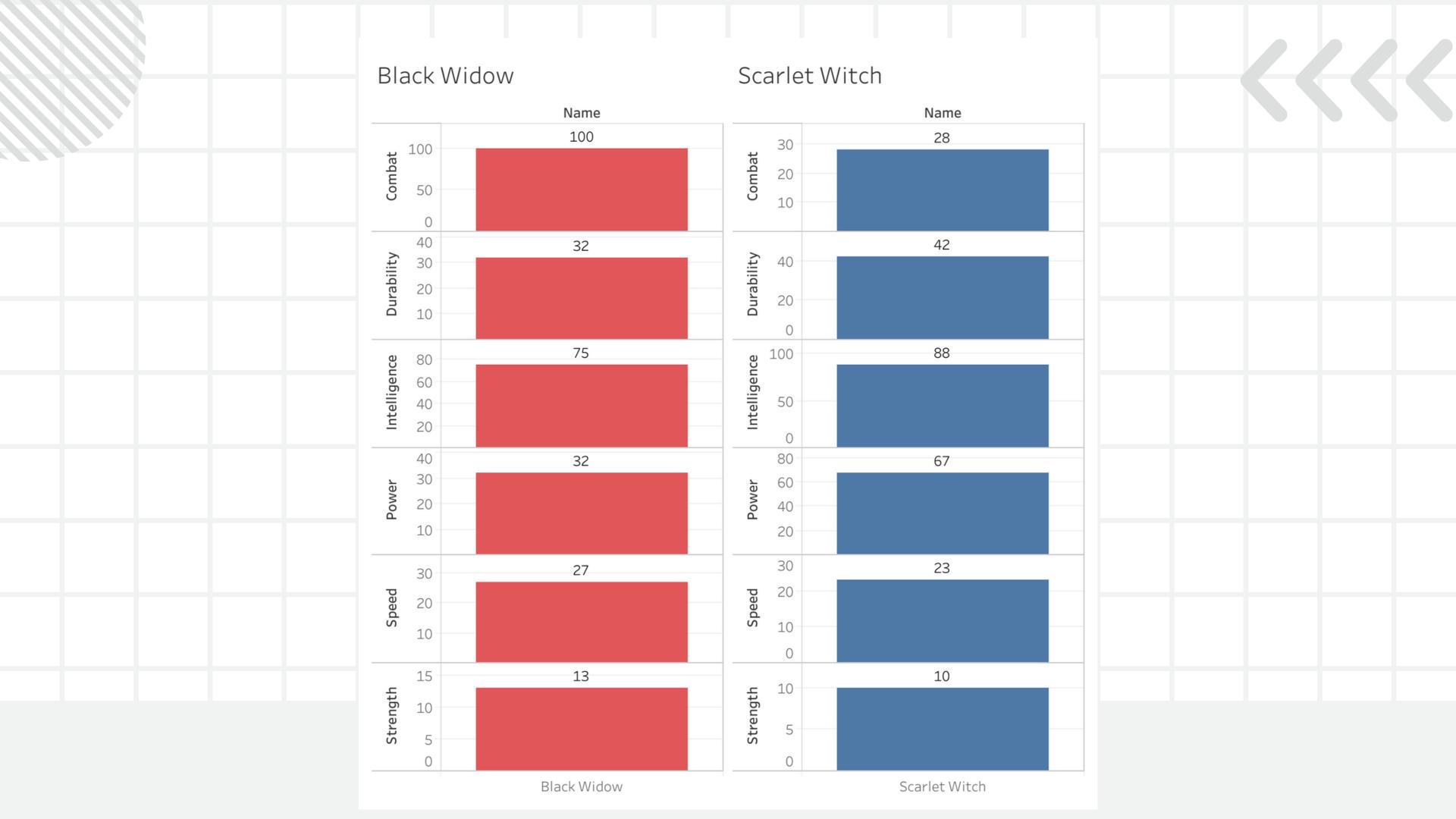


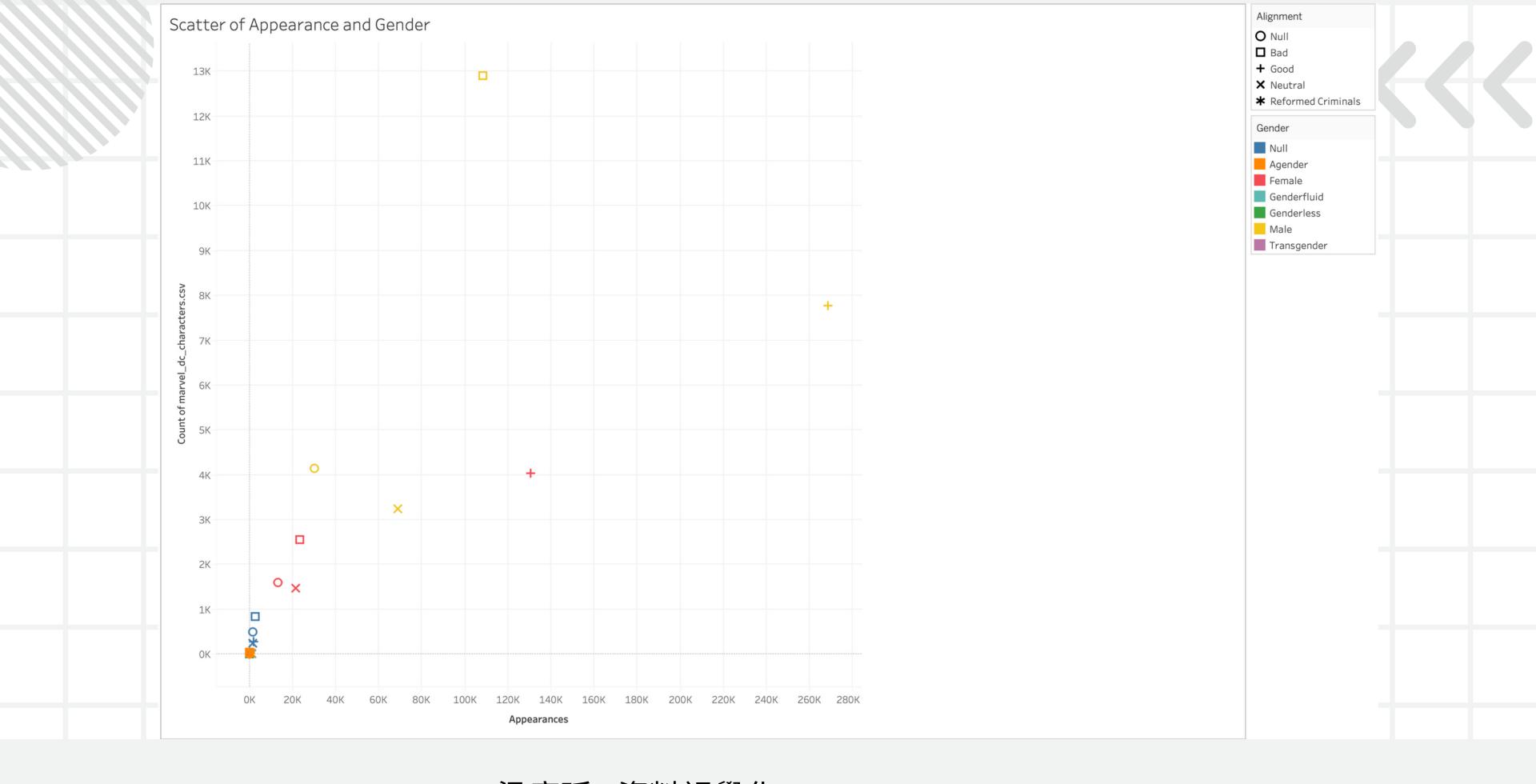
# CIVIL WAR ANALYSIS



Team Cap vs Team Iron Man







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### CONCLUSION

1963 Appearance the most
Secret the most

- Bad the most
- Nova is the most powerful hero
- In civil war, Team Iron Man is more powerful

### TABLEAU PUBLIC LINK

<u>link</u>

# THANK YOU

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