

A decorative graphic on the left side of the slide consisting of two overlapping parallelograms. The front one is blue and the back one is a light green. They are positioned diagonally, with the blue one partially covering the green one.

# Game Sales and Data Visualization

8/10/2021  
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# Introduction

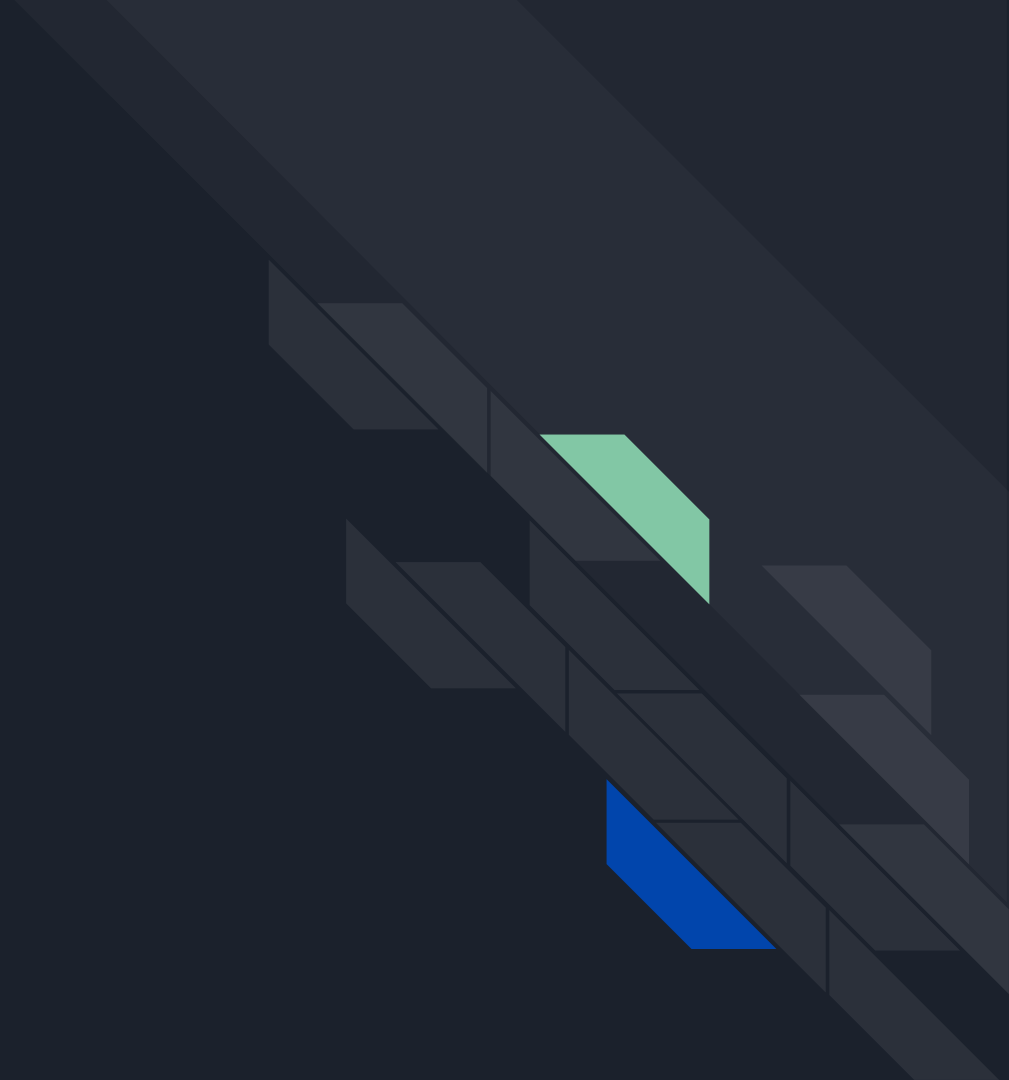
- Originally set out to investigate what makes a video game successful.
- Data set issues lead to pivot to focus primarily on exploration of visualization tools and techniques.

Relationships to be visualized:

- Average critic review scores by publisher
- Total sales by genre and platform
- Critic scores and total sales



Tableau



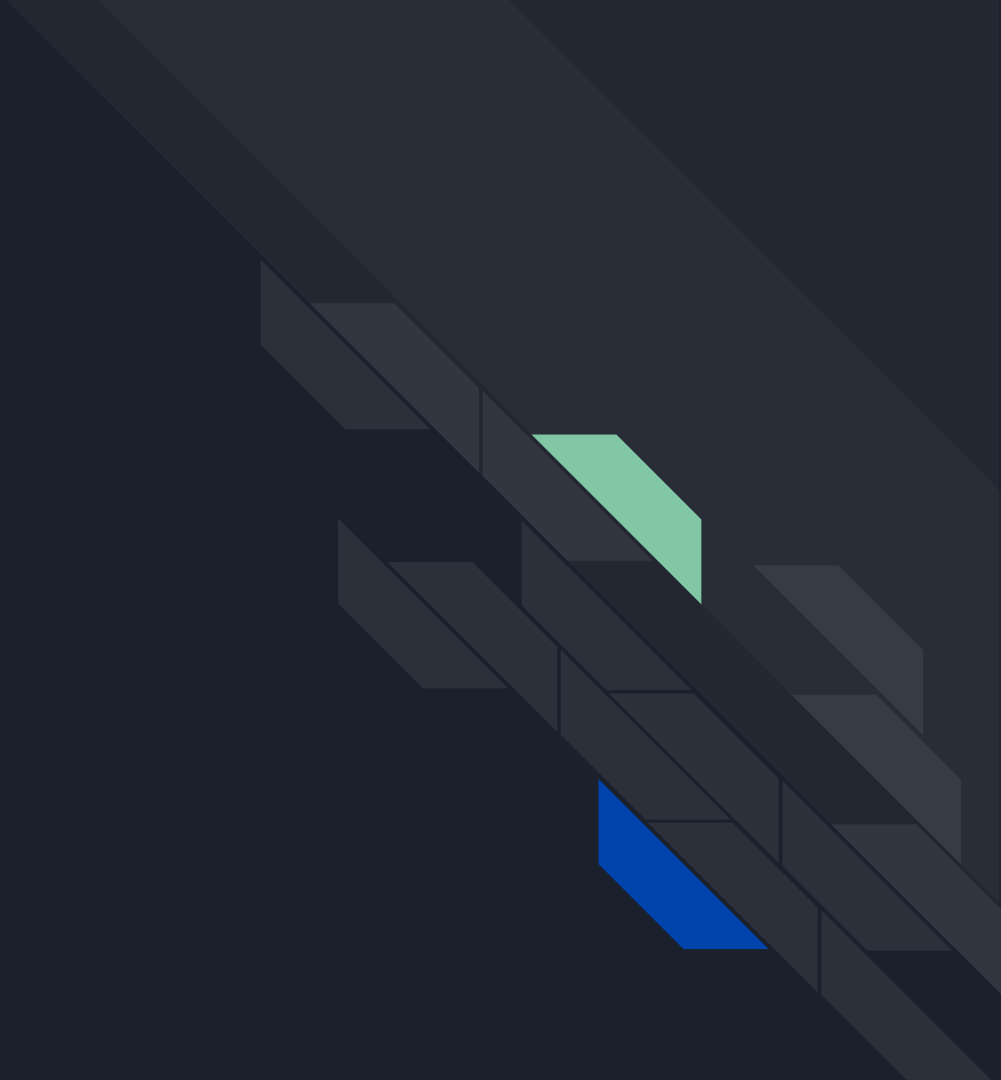


# Tableau Public

Link:

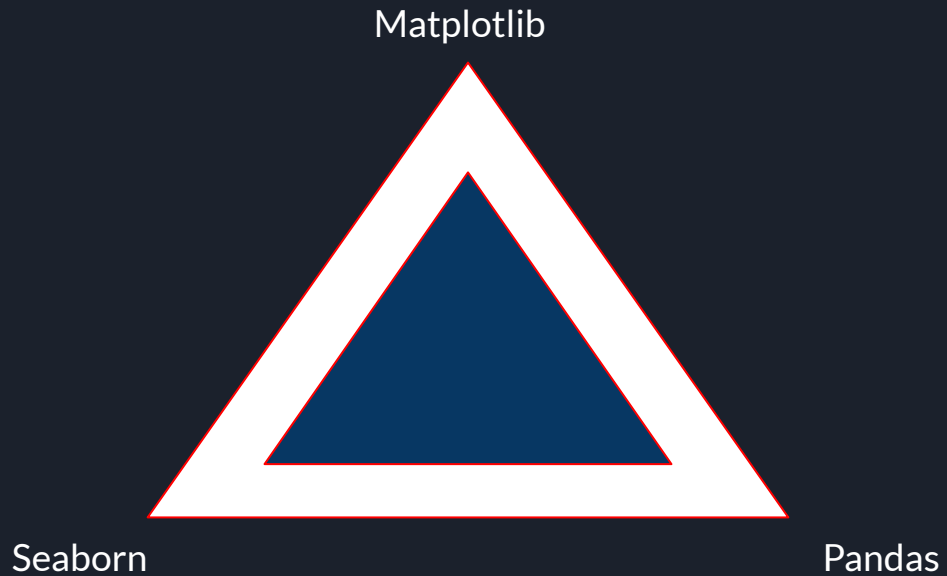
<https://public.tableau.com/app/profile/andrew.wilson7224/viz/GameSalesVisualizations/GameSalesVisualizations>

Python

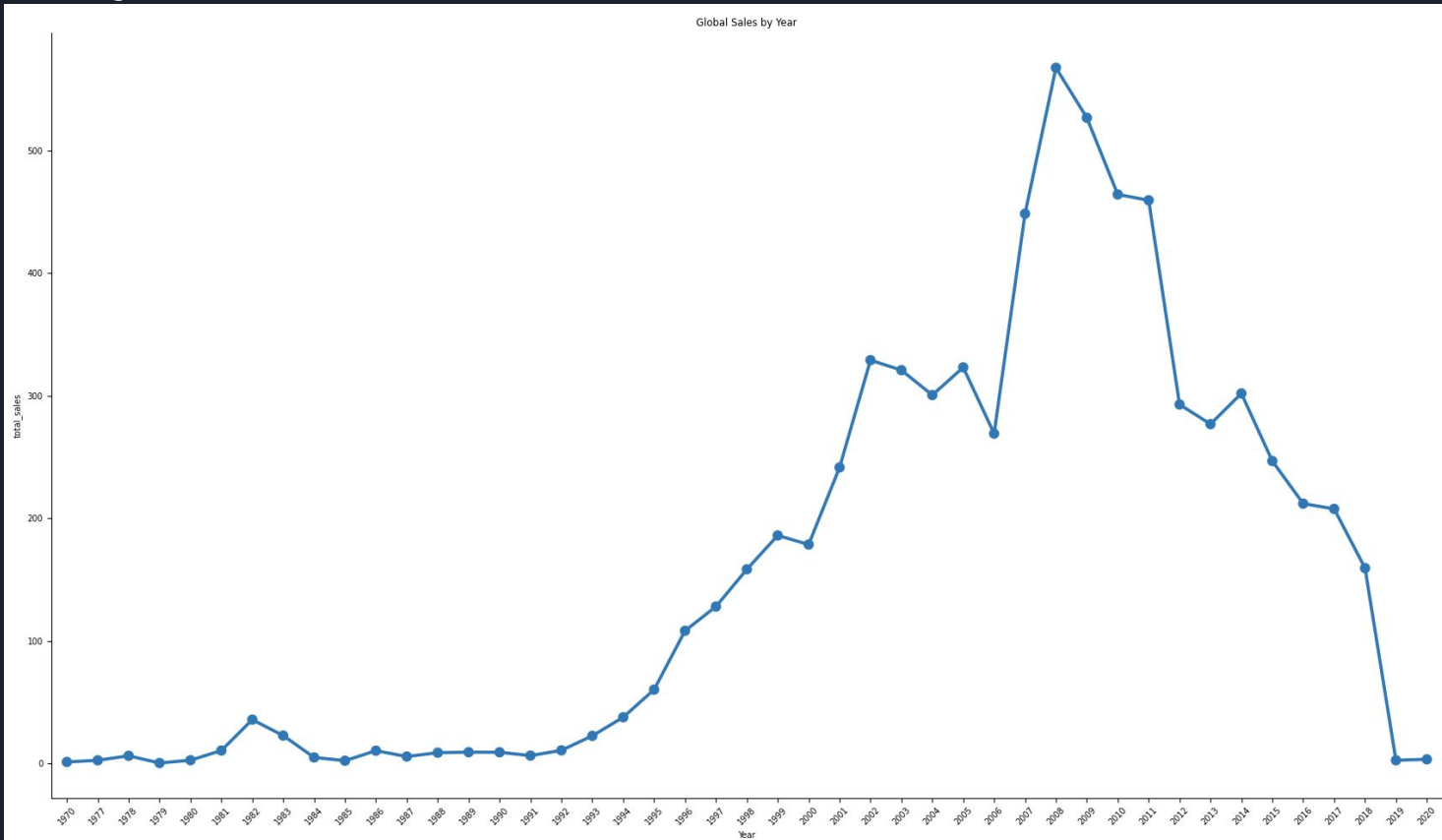




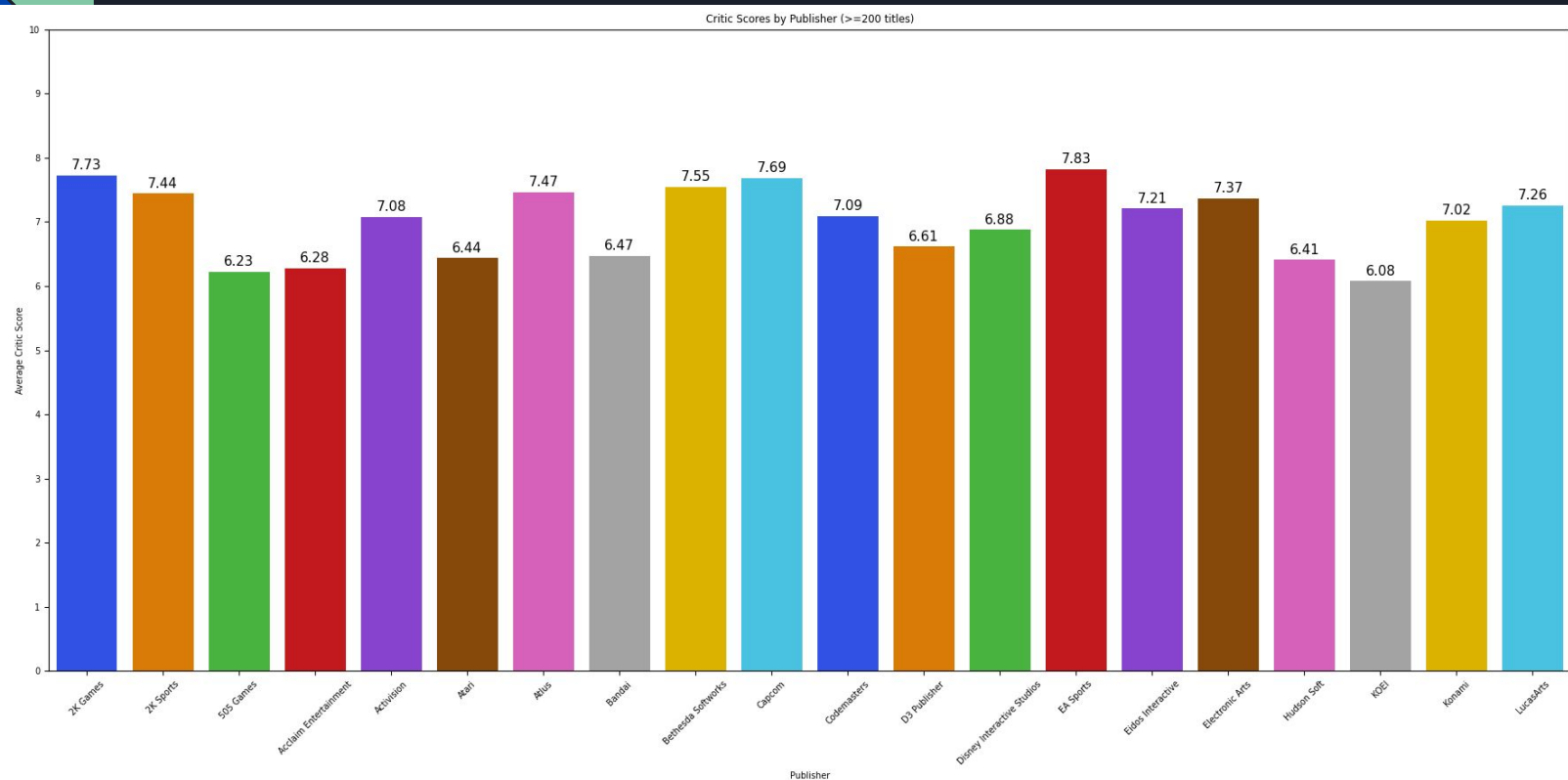
# Python Tools



# Python Recreations: Global Sales

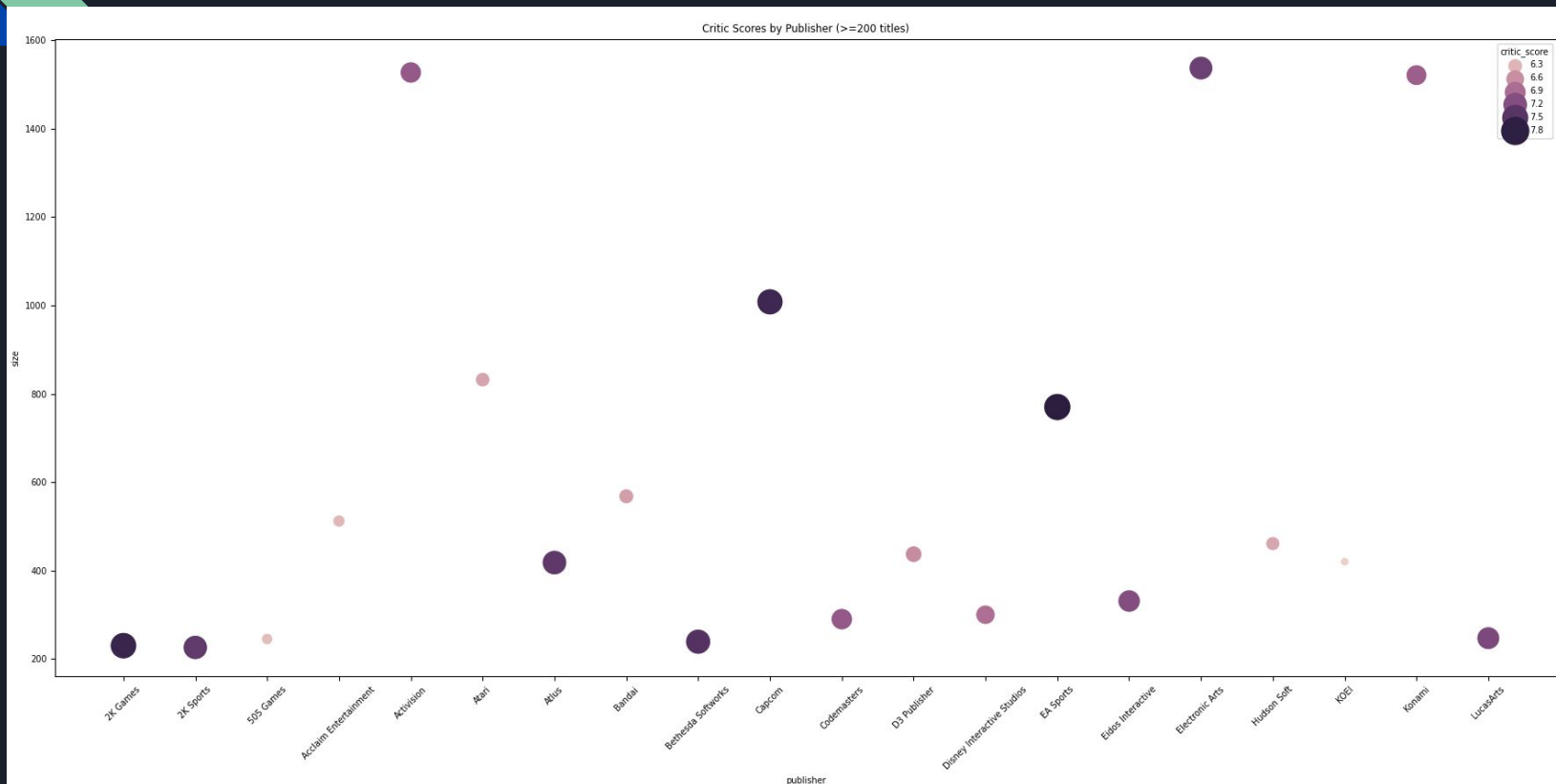


# Python Recreations: Review Scores by Publishers

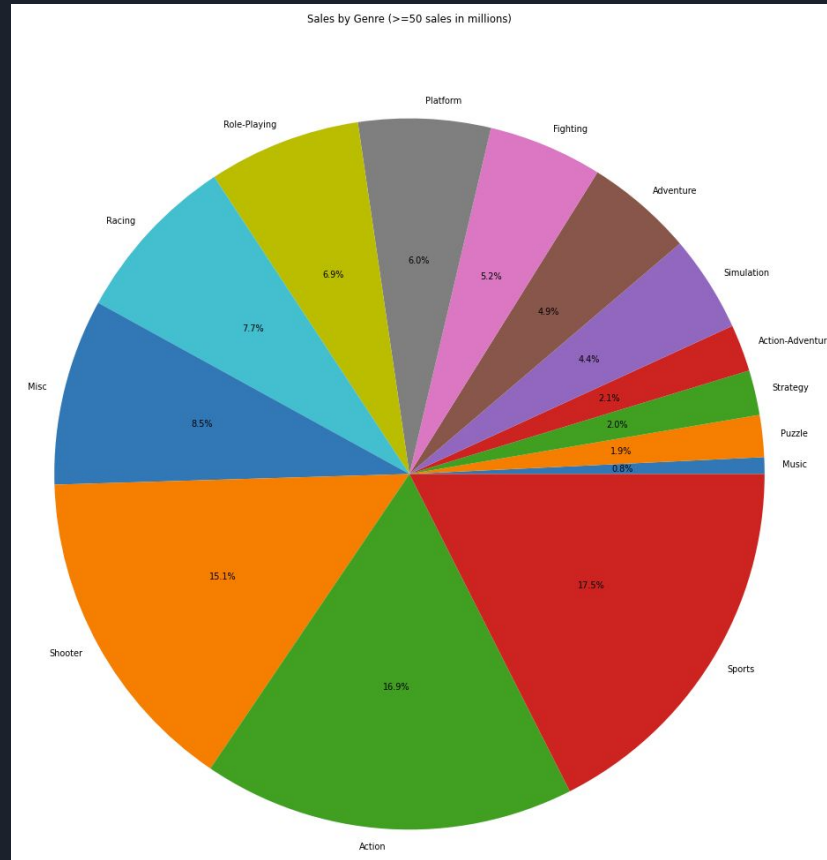




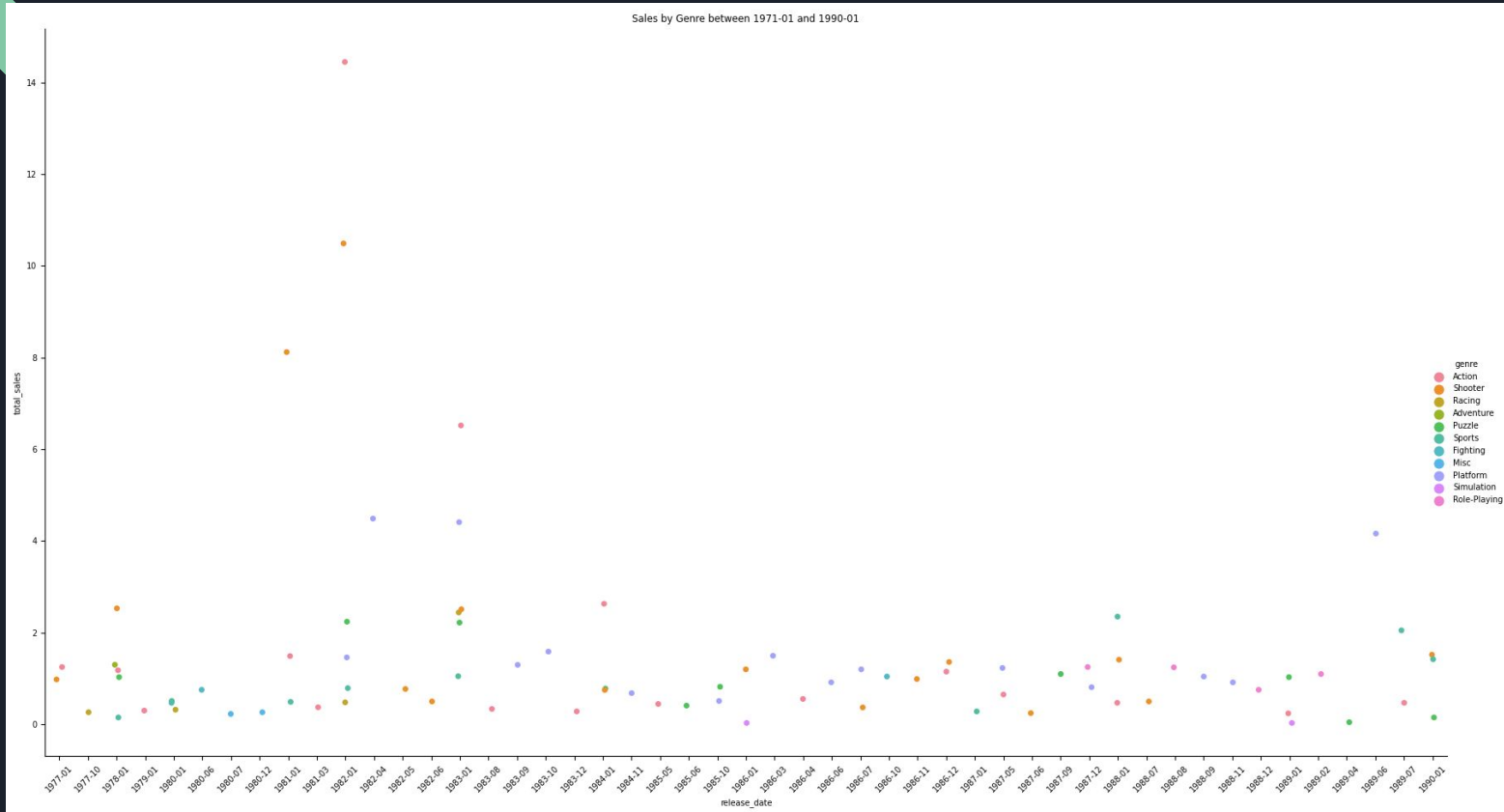
# Python Recreations: Review Scores by Publishers



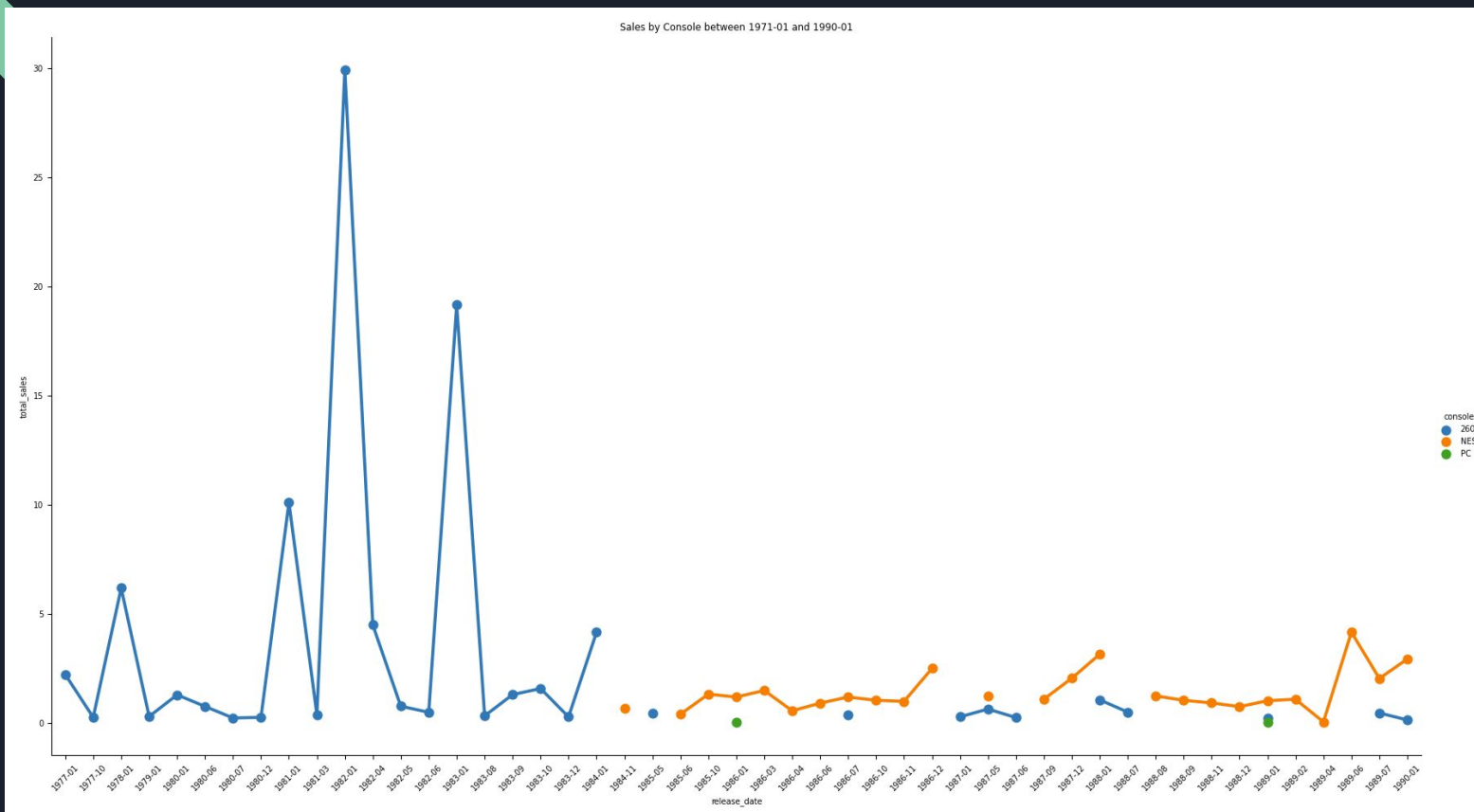
# Python Recreations: Sales by Genre



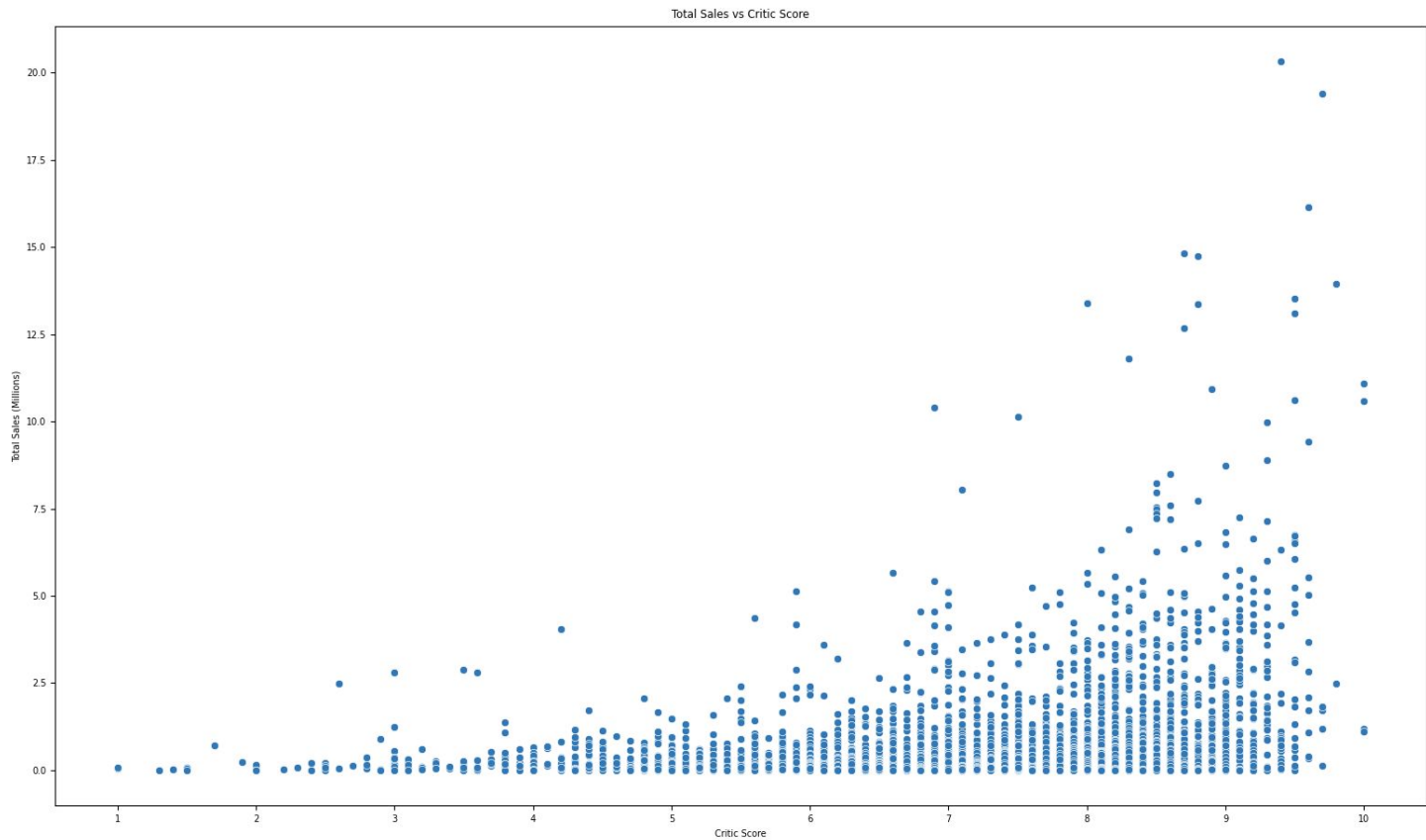
# Python Recreations: Sales by Genre



# Python Recreations: Sales by Platform



# Python Recreations: Total Sales vs Critic Scores




# In Summary...



- Pros
  - Free
  - Easy for simple visualizations
- Cons
  - Formatting
  - Unique graphs
  - Run time



- Pros
  - It is intuitive
  - Easy to duplicate/slice/remix data views
  - Tableau public makes sharing a snap
  - Good as either 'first step' to do rough vizs or as main tool for full analysis
- Cons
  - Limited access 'under the hood'
  - Cost \$\$\$



*“Dedicated business intelligence software exists for a reason! Try using something besides Excel next time you want to look at data!”*

*- Andy & Austen, 2021*

Questions?







# License

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# GitHub Link

[https://github.com/AustenHsiao/data\\_science\\_sales](https://github.com/AustenHsiao/data_science_sales)



# Sources

- (1) Brannen, B. Video Game Sales 2020. (July 2020). Retrieved July 10th, 2021 from <https://www.kaggle.com/baynebrannen/video-game-sales-2020>
- (2) Mordor Intelligence. *Gaming Market - Growth, Trends, COVID-19 Impact, and Forecasts (2021 - 2026)*; 2021.
- (3) Babb, J.; Terry, N. Comparing Video Game Sales by Gaming Platform. *Southwest. Econ. Rev.* **2013**, 40 (1), 25–46.
- (4) Cox, J. What Makes a Blockbuster Video Game? An Empirical Analysis of US Sales Data. *Manag. Decis. Econ.* **2014**, 35 (3), 189–198. <https://doi.org/10.1002/mde.2608>.
- (5) Pratt, M; Fruhlinger J. 2019. *What is business intelligence? Turning data into business insights*. (October 2019). Retrieved July 5, 2021 from <https://www.cio.com/article/2439504/business-intelligence-definition-and-solutions.html>
- (6) Tanner, G. 2019. *Introduction to Data Visualization in Python*. Retrieved July 7, 2021, from <https://towardsdatascience.com/introduction-to-data-visualization-in-python-89a54c97fbed>