**Tools Used:**

* Software: Jupyter Notebook
* Python Packages:
  + pandas - data manipulation
  + numpy - numerical operations
  + matplotlib & seaborn - data visualization

**Questions Asked:**

1. Which video game genres have generated the most global sales over time?
2. Are there clear regional preferences for certain genres or platforms?
3. Which publishers consistently release high-performing games?
4. Which platforms have the most top-selling titles?
5. Do older games have better sales performance than newer releases?

**Insights Discovered:**

* Global Genre Trends: Action, Sports, and Shooter games top the charts for global sales, with Action maintaining a strong presence across multiple decades.
* Regional Preferences: Distinct patterns emerged:
  + Japan favors Role-Playing (RPG) titles.
  + North America has a strong preference for Shooter and Sports games.
  + Europe shows more balanced preferences, though Racing and Action are popular.
* Top Publishers: Companies like Nintendo, Electronic Arts (EA), and Activision consistently produce top-selling games. Nintendo especially dominates with long-standing franchises like Mario, Pokémon, and Zelda.
* High-Performing Platforms: The PlayStation 2, Nintendo Wii, and Nintendo DS have hosted many best-selling games, showing the importance of a large user base and family-friendly appeal.
* Sales Over Time: While newer games may trend online or digitally, the dataset shows that many top-selling games were released between 2005–2012, suggesting that longevity in the market and console popularity heavily influence cumulative sales.

**Recommendations:**

* Invest in franchises with established success in the Action, Sports, and Shooter genres.
* Tailor game development and marketing efforts based on regional tastes—e.g., localizing RPGs for Japan or emphasizing multiplayer Shooters in North America.
* Prioritize releases on platforms with large user bases and broad demographic appeal.
* Strategize launch windows for long-term sales performance rather than short-term trends, considering factors like holiday seasons and console life cycles.

**Future Work:**

* Incorporate critic/user ratings to study their influence on sales
* Incorporate digital sales to evaluate current day trends
* Explore seasonal trends in release dates and sales performance
* Develop a predictive model to estimate a game’s sales based on its attributes