

REPORT ON UNCOVERING THE GAMING INDUSTRY'S HIDDEN GEMS: A COMPREHENSIVE ANALYSIS OF VIDEO GAME SALES

1 INTRODUCTION

1.1 Overview

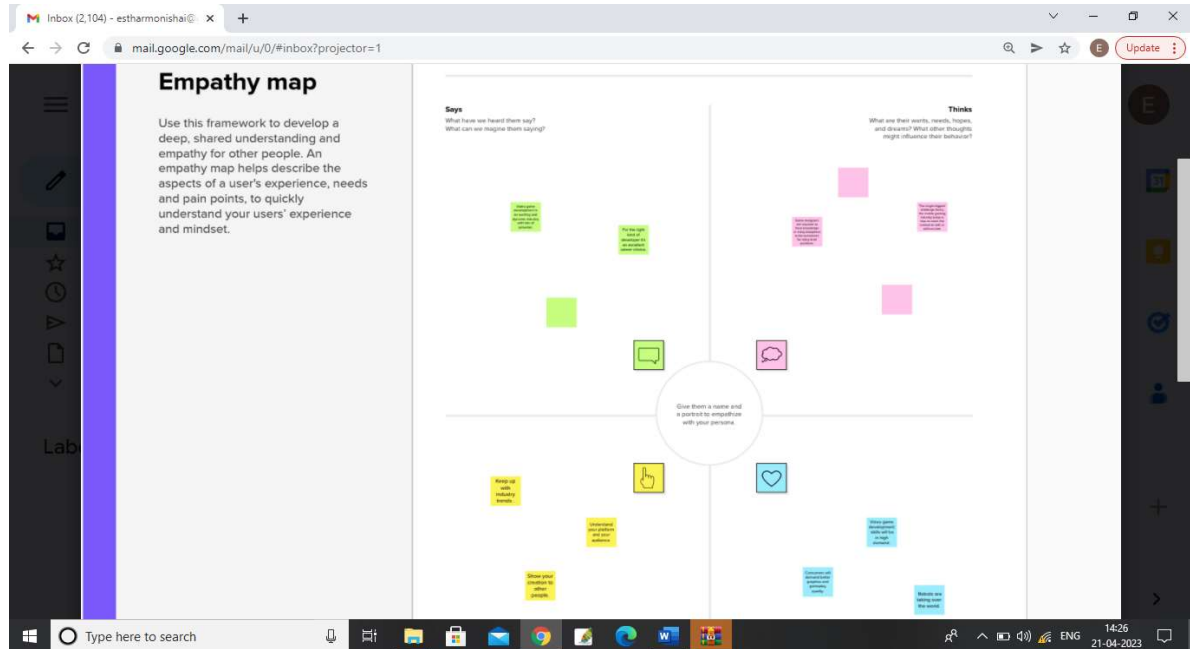
Video game sales analysis is the process of collecting and analyzing data about the sales of video games in order to understand market trends and consumer behavior. This type of analysis can be useful for a variety of purposes, including identifying the most popular games and genres, predicting future sales, and developing marketing strategies. Video game sales analysis typically involves collecting data from Kaggle sources. It was generated by a scrape of vgchartz.com. This data may include information about the number of units sold, the retail price, and the platforms on which the games are played. Once the data has been collected, it is typically analyzed using tableau. The results of the analysis can be used to identify trends and patterns in the market, and to make informed decisions about the development and marketing of video games. Video game sales analysis may be conducted by game developers, publishers, retailers, and other industry professionals. It is an important part of the video game industry, as it helps to understand the needs and preferences of consumers and to identify opportunities for growth and innovation. Analysing sales data from more than 16,500 games. This dataset contains a list of video games with sales greater than 100,000 copies. It was generated by a scrape of vgchartz.com.

1.2 Purpose

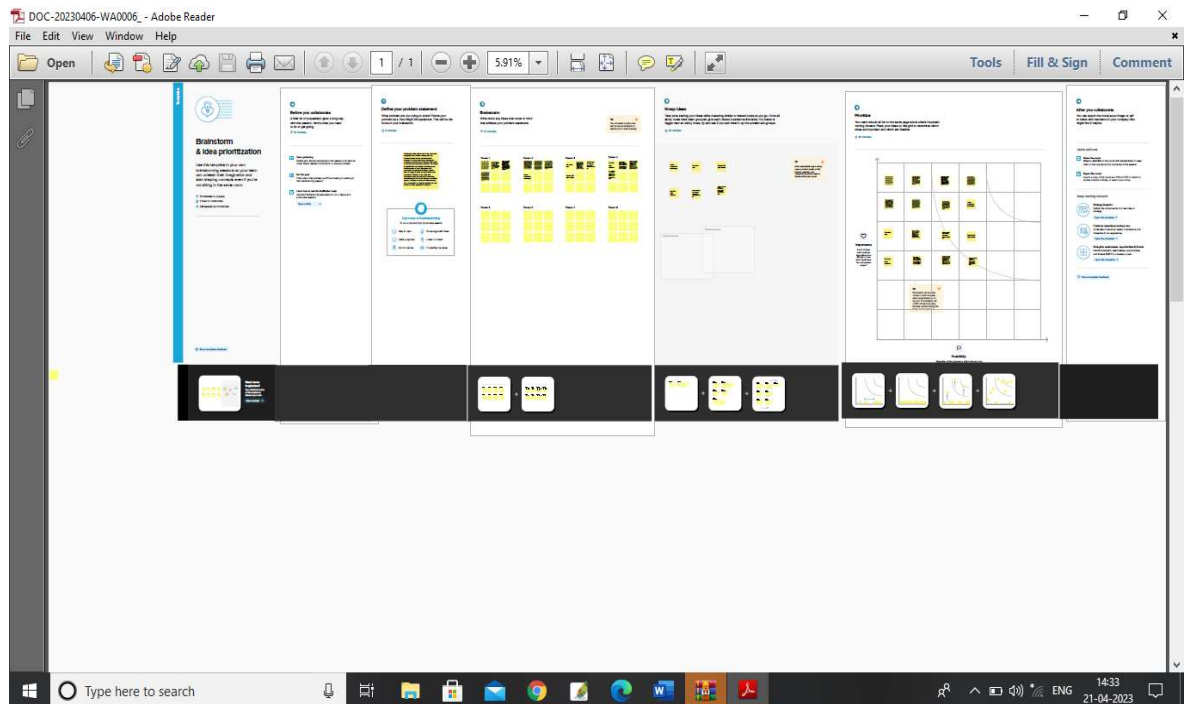
Gaming analytics can be best defined as is the whole process of applying user behavior data to guide sales & marketing, product enhancements, and business decisions for any gaming company. Data analytics is a powerful tool in the gaming industry. In this project, we have learn about analysis of video game sales using MySQL and Tableau.

2 PROBLEM DEFINITION & DESIGN THINKING

2.1 Empathy Map

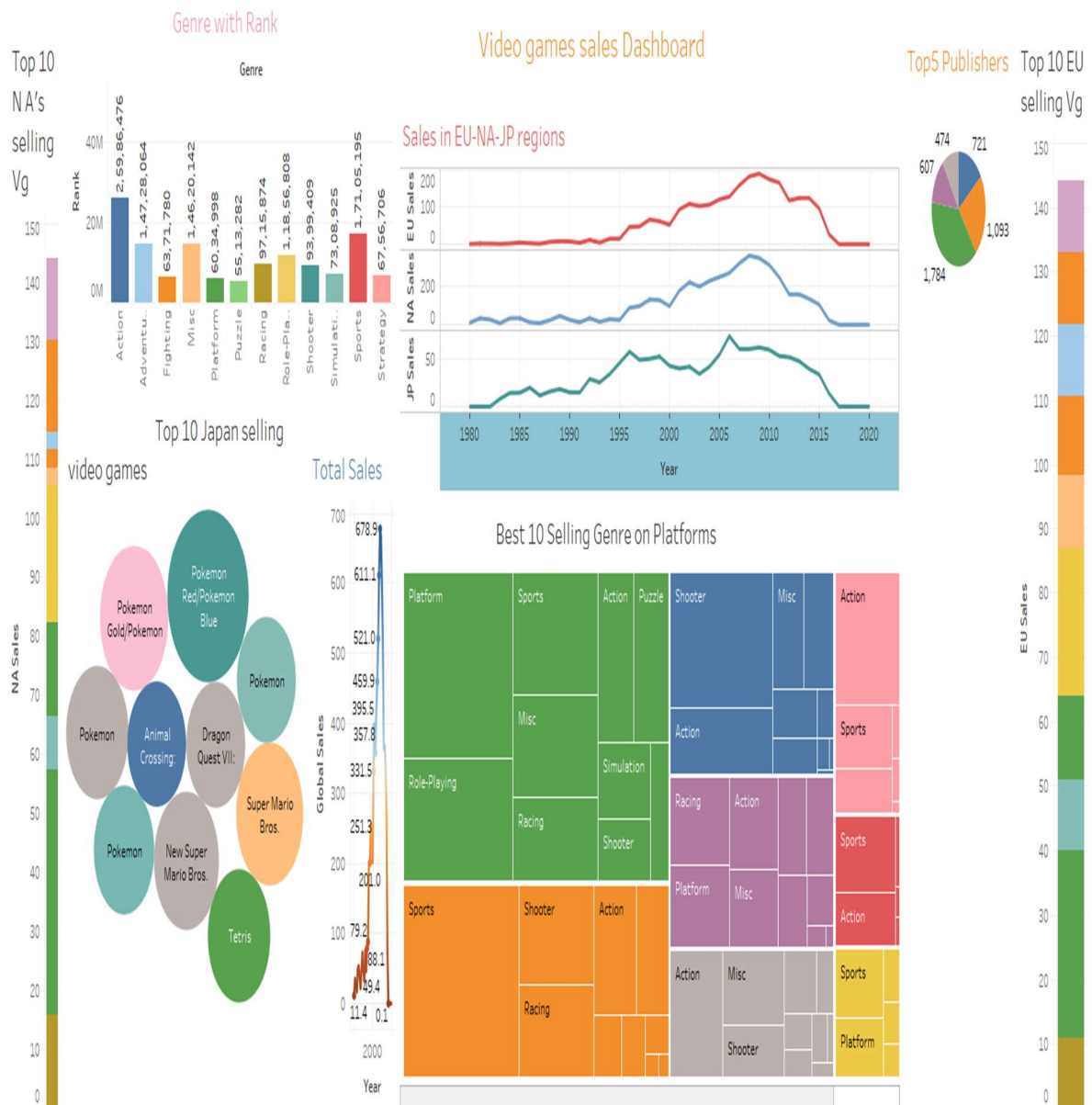


2.2 Ideation & Brainstorming Map



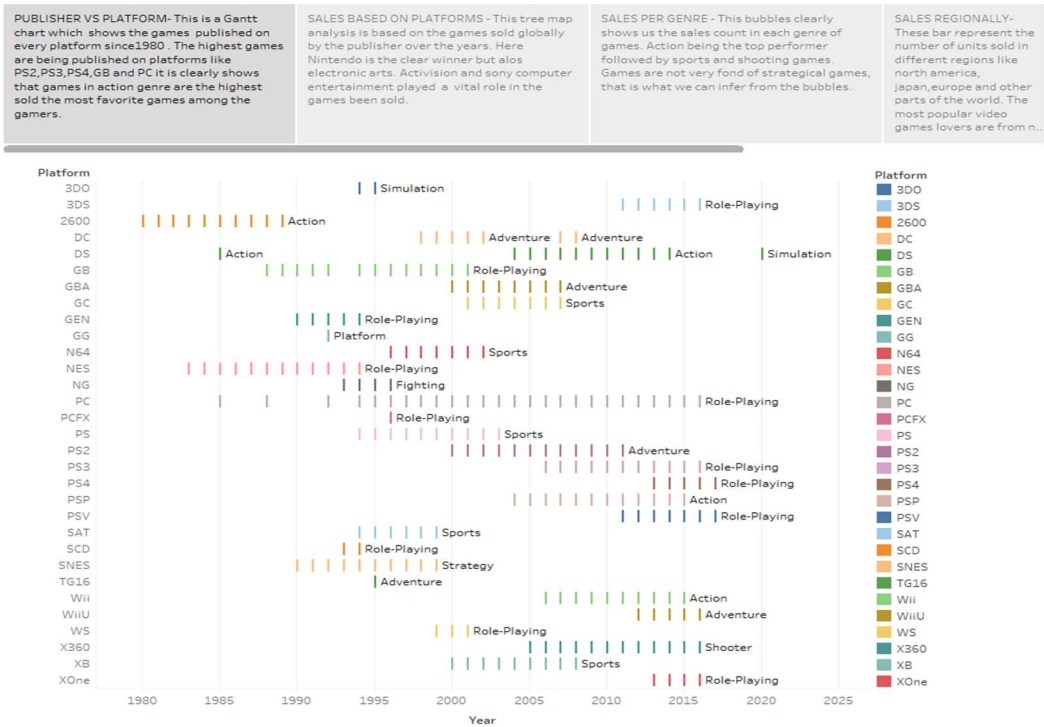
3 RESULT

Video games sales Dashboard



Video games sales Story

Video games sales story

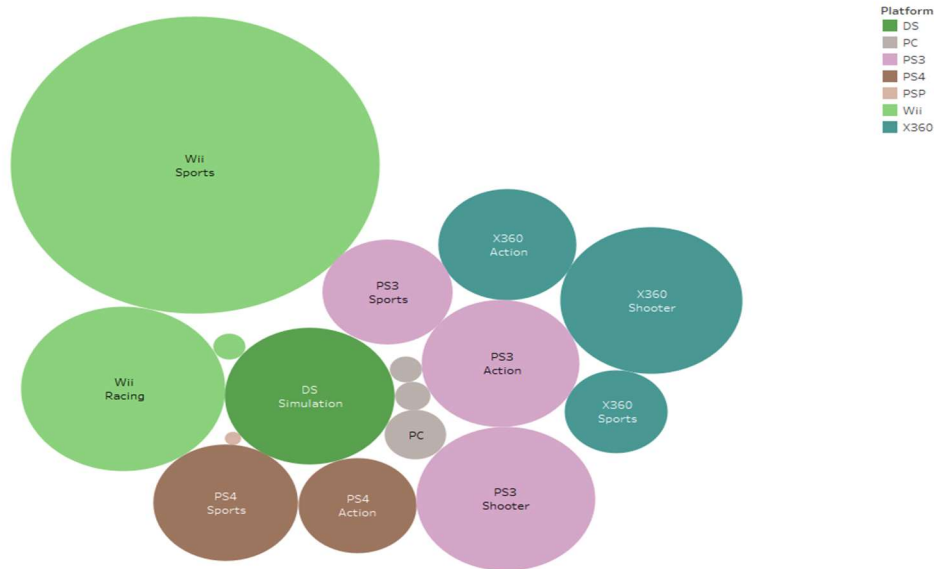


Video games sales story



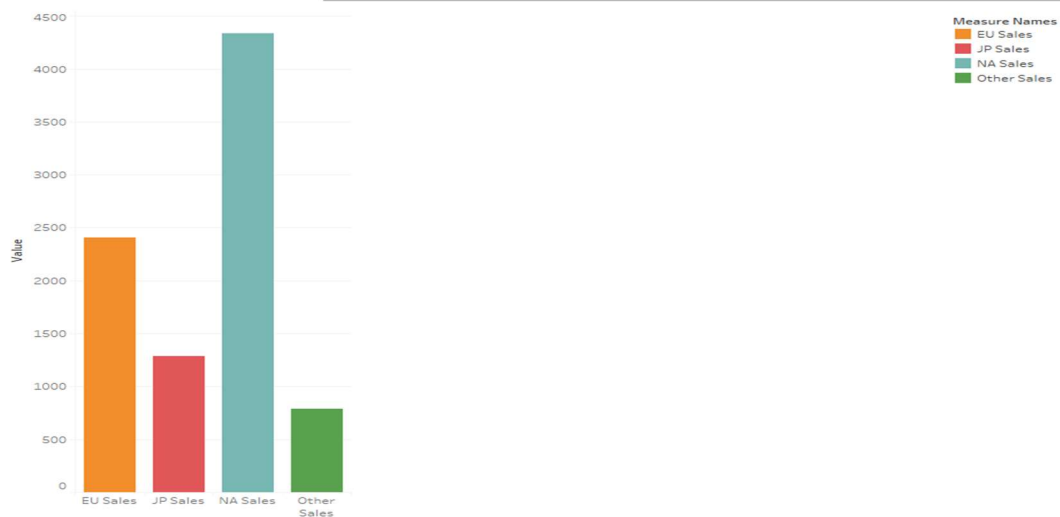
Video games sales story

PUBLISHER VS PLATFORM- This tree map analysis is based on the games sold globally by the publisher over the years. Here Nintendo is the clear winner but also electronic arts, Activision and Sony computer entertainment played a vital role in the games been sold.	SALES BASED ON PLATFORMS - This tree map analysis is based on the games sold globally by the publisher over the years. Here Nintendo is the clear winner but also electronic arts, Activision and Sony computer entertainment played a vital role in the games been sold.	SALES PER GENRE - This bubbles clearly shows us the sales count in each genre of games. Action being the top performer followed by sports and shooting games. Games are not very fond of strategical games, that is what we can infer from the bubbles.	SALES REGIONALLY- These bar represent the number of units sold in different regions like north america, japan, europe and other parts of the world. The most popular video games lovers are from north america as the units sold here are the highest and other parts of the world and yet get the craze for the video games.	TOTAL SALES- The line graph here represents the over all sales of video games over the ye..
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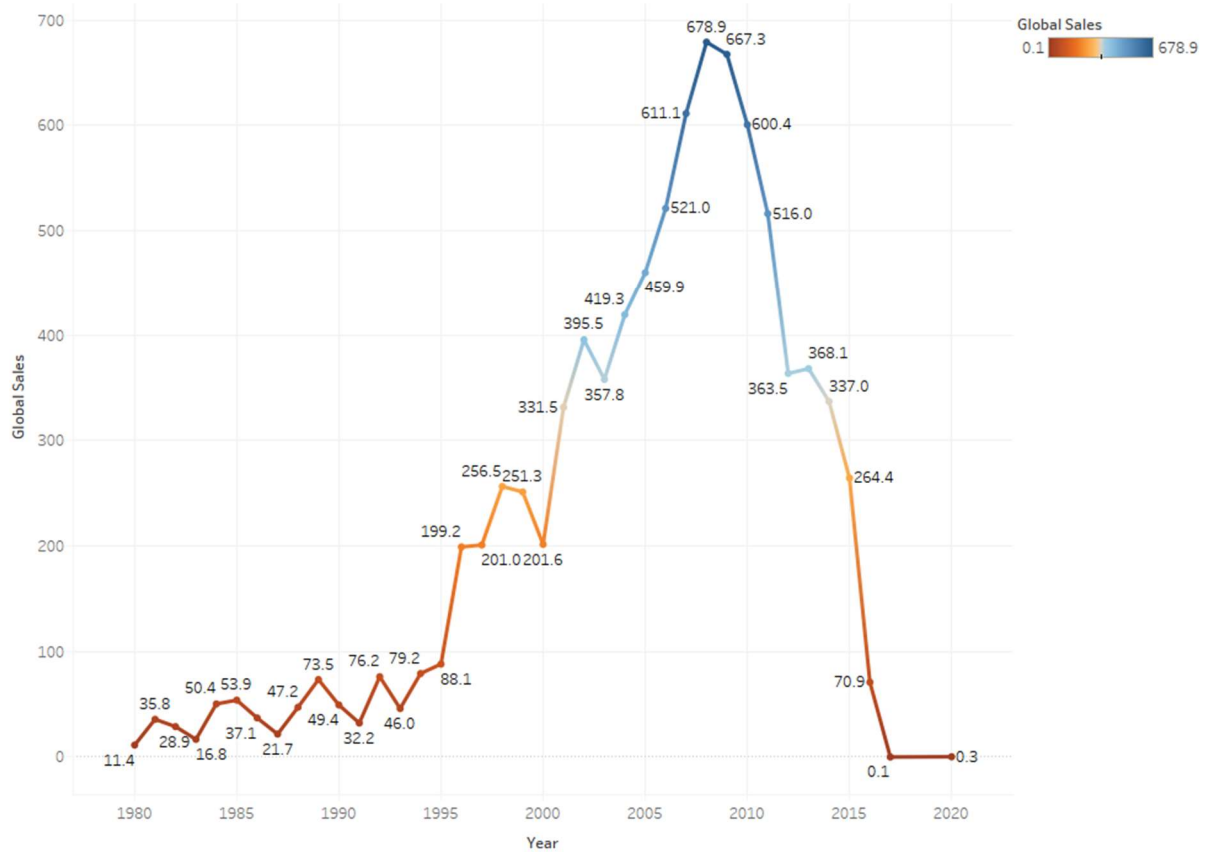
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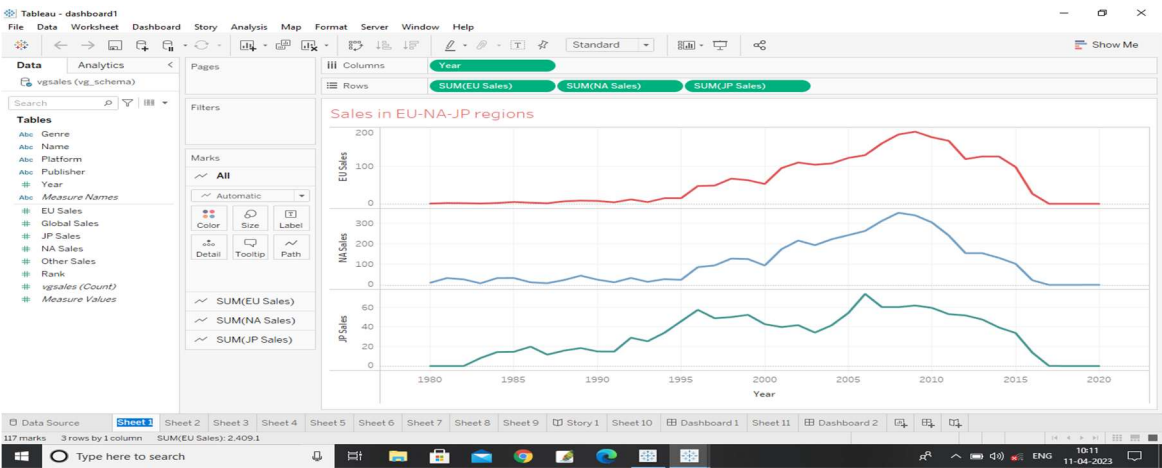
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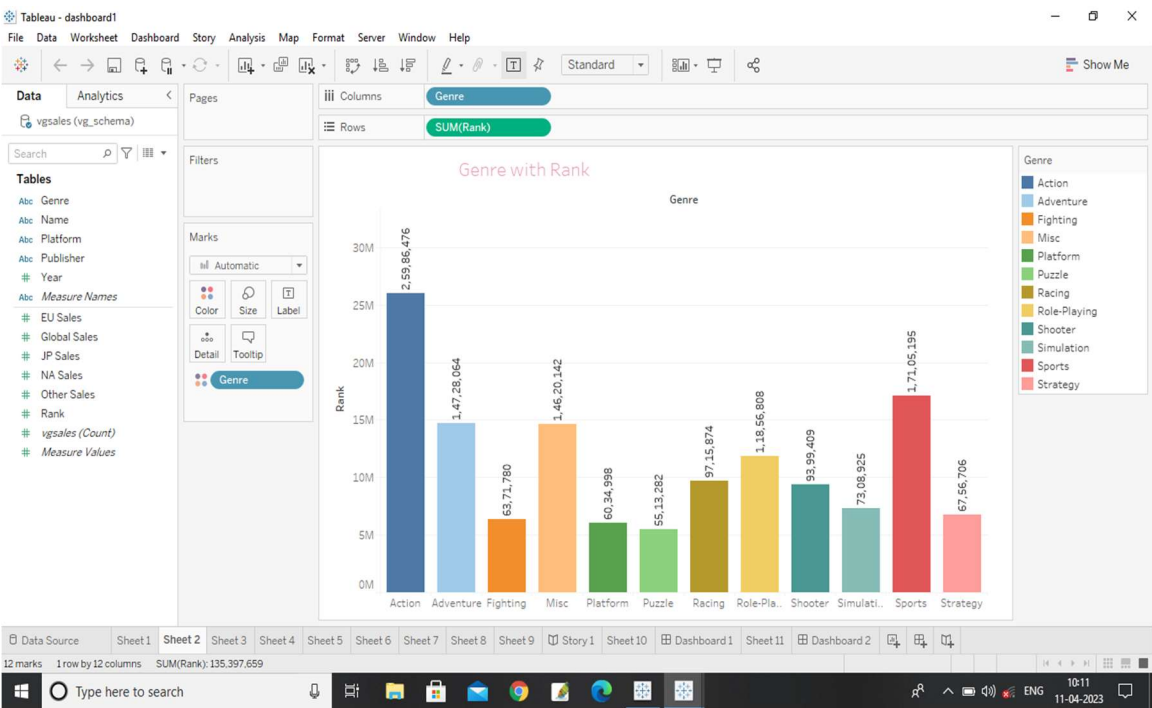
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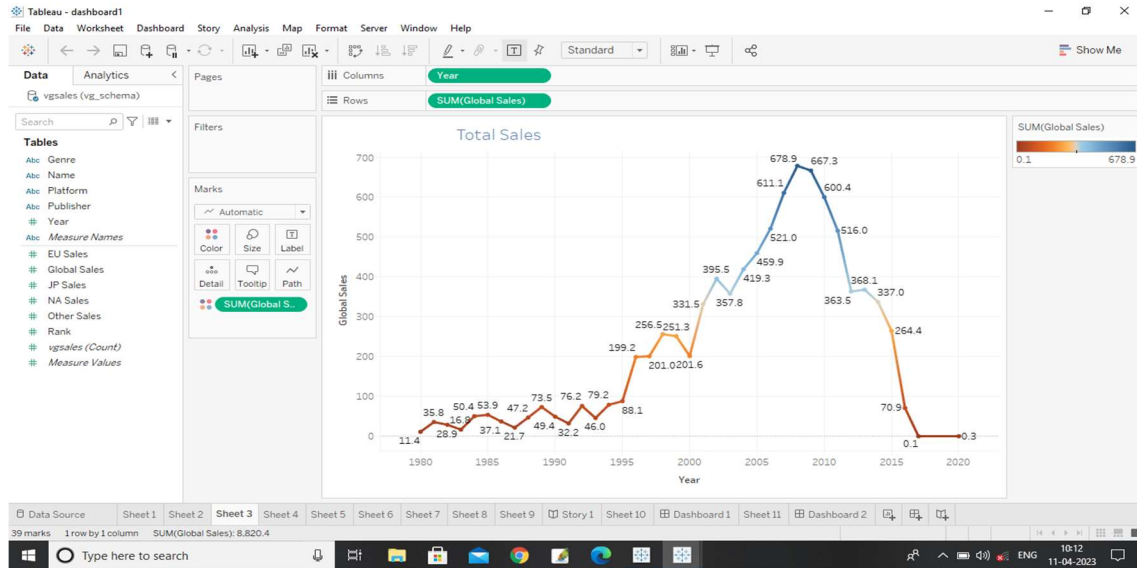
Sales in EU-NA-JP regions



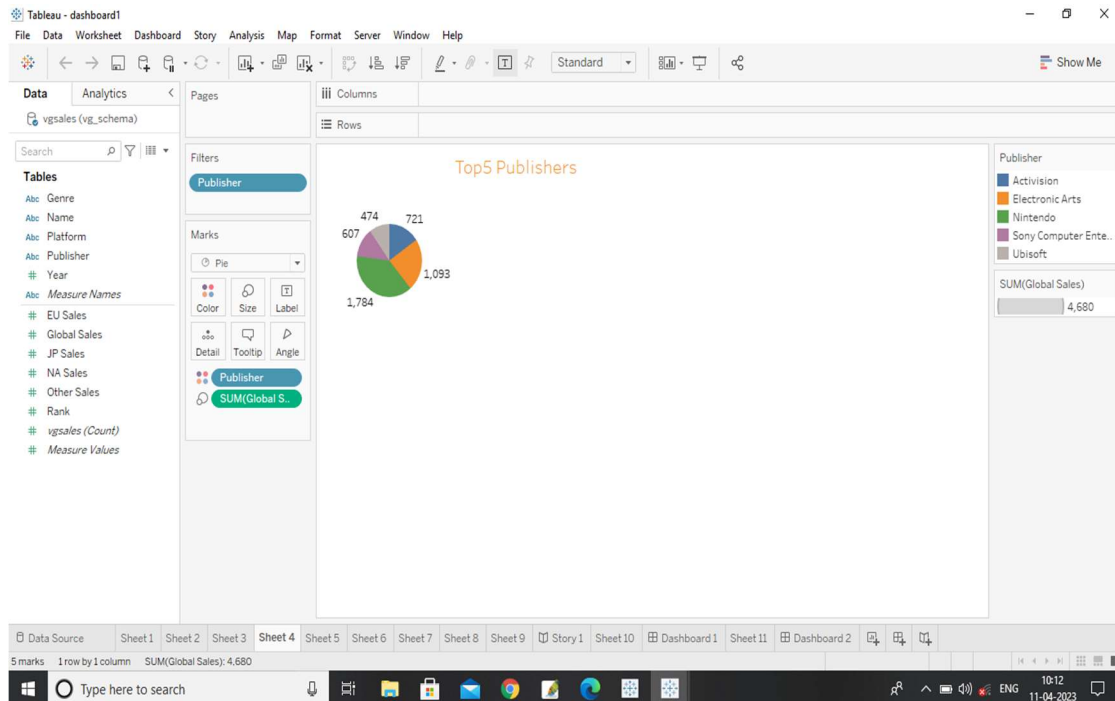
Genre with Rank



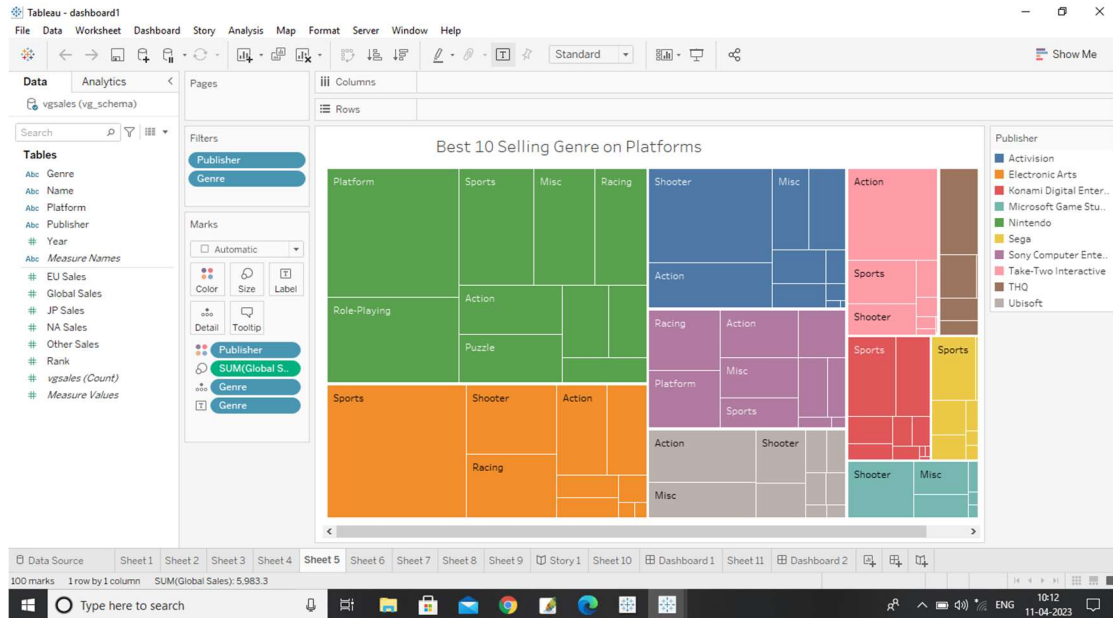
Total Sales



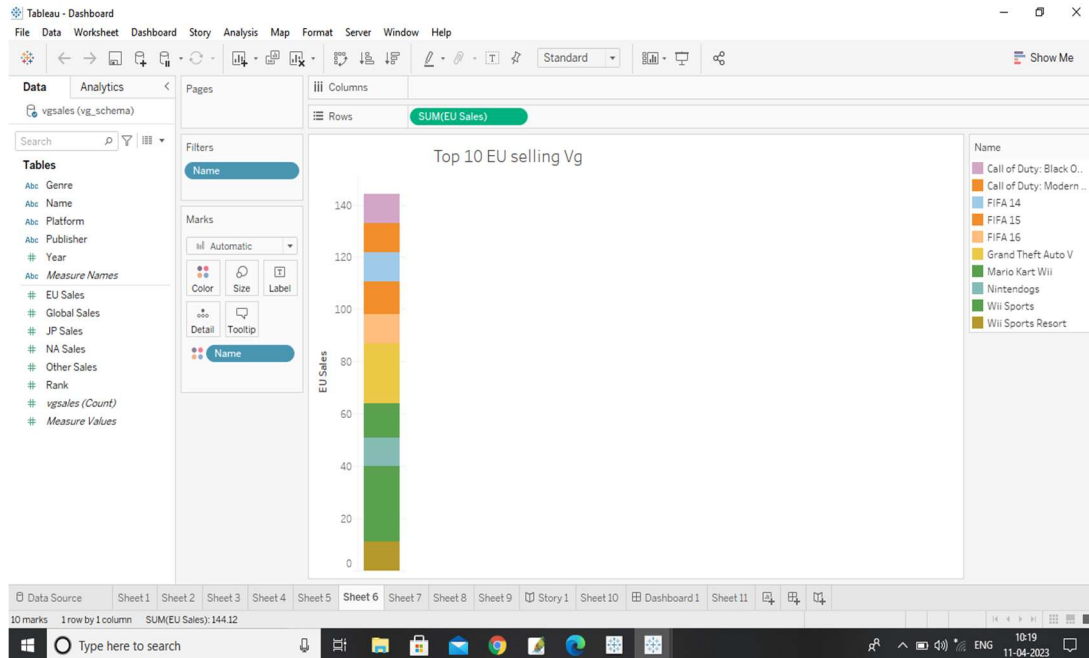
Top 5 Publishers



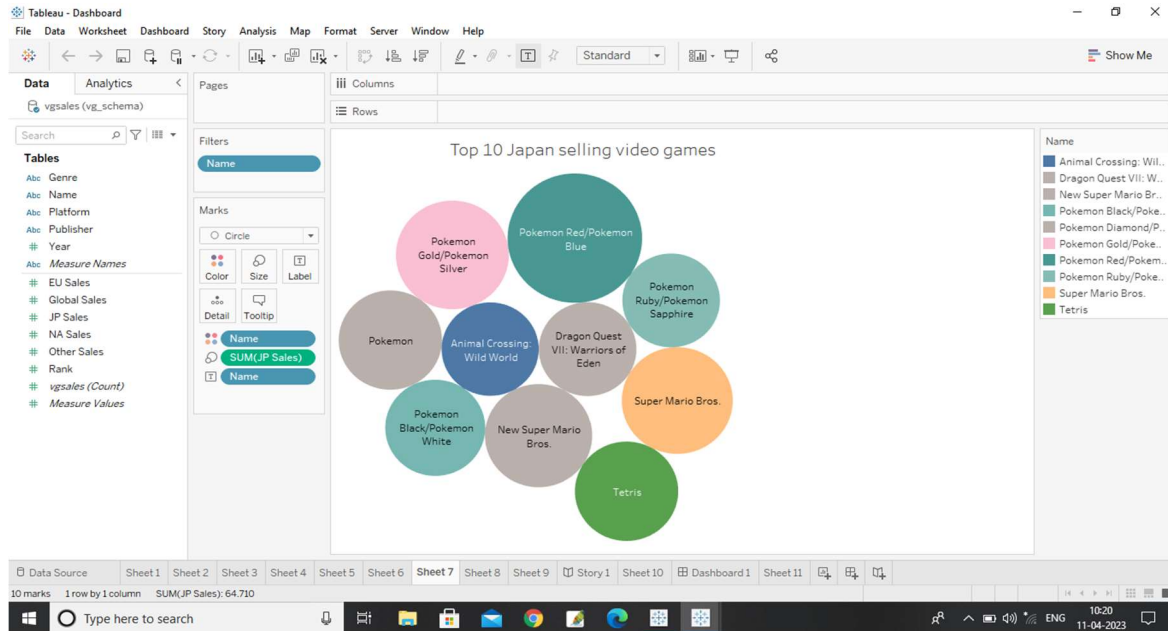
Best 10 Selling Genre on Platforms



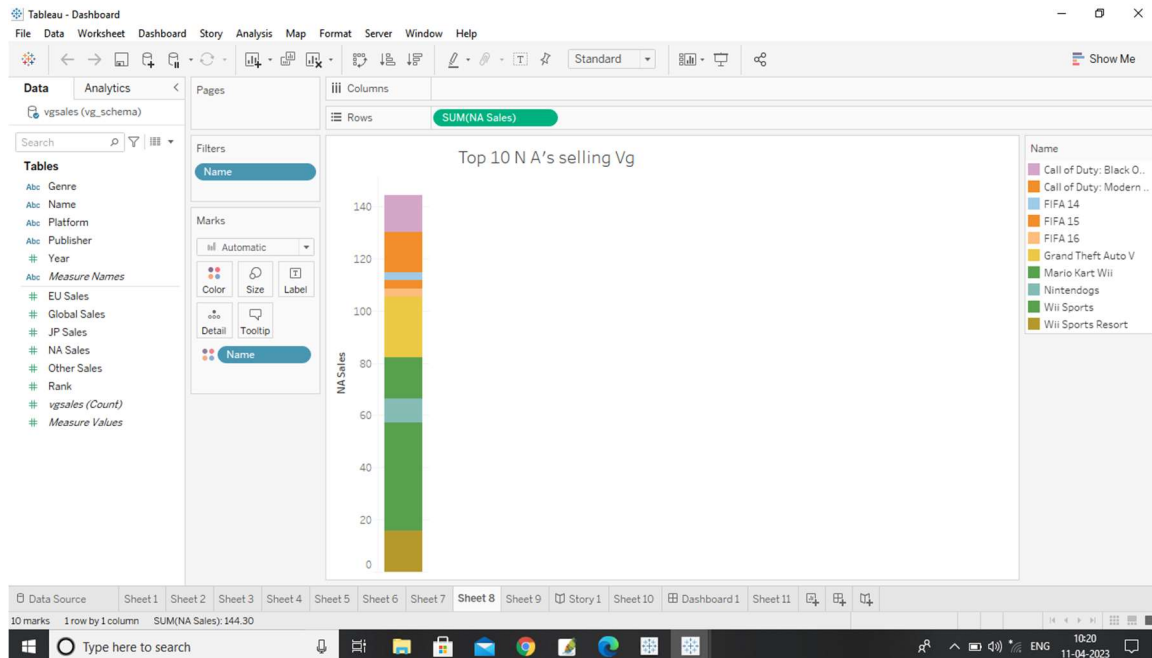
Top 10 EU Selling Vg



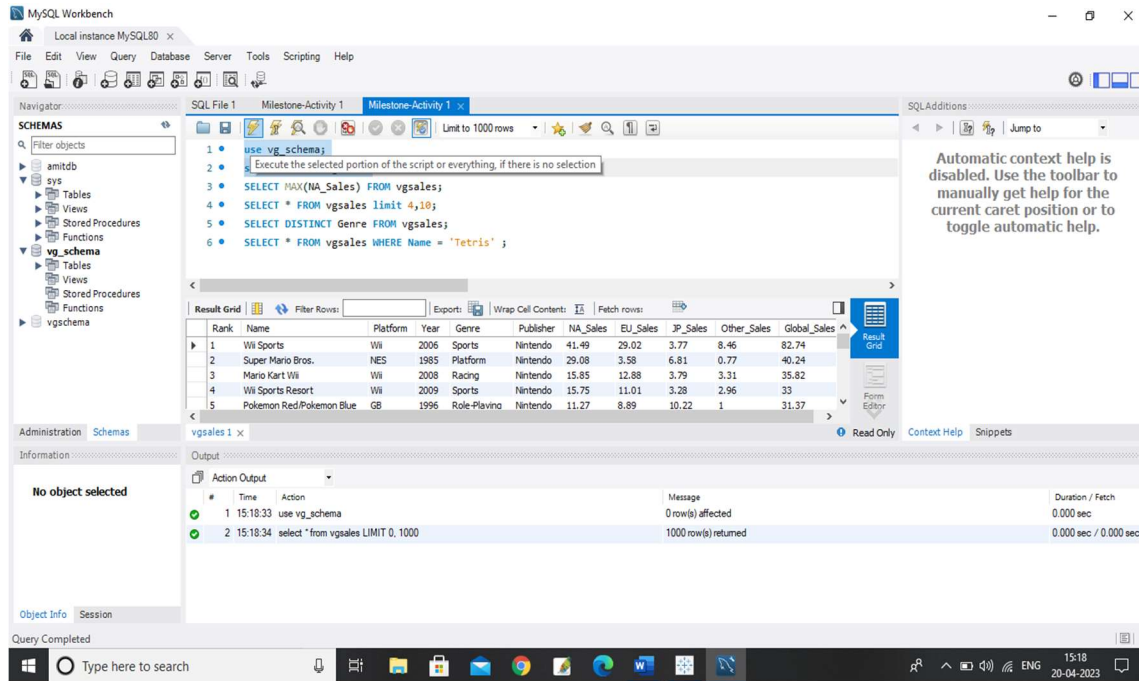
Top 10 Japan Selling Video Games



Top 10 NA's Selling Vg



SQL Operations



MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

amitdb

sys

Tables

Views

Stored Procedures

Functions

vg_schema

Tables

Views

Stored Procedures

Functions

vgschema

SQL File 1 Milestone-Activity 1 Milestone-Activity 1

1 use vg_schema;

2 select * from vgsales;

3 SELECT MAX(NA_Sales) FROM vgsales;

4 SELECT * FROM vgsales limit 4,10;

5 SELECT DISTINCT Genre FROM vgsales;

6 SELECT * FROM vgsales WHERE Name = 'Tetris';

Result Grid

Rank	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sales
1	Wii Sports	Wii	2006	Sports	Nintendo	41.49	29.02	3.77	8.46	82.74
2	Super Mario Bros.	NES	1985	Platform	Nintendo	29.08	3.58	6.81	0.77	40.24
3	Mario Kart Wii	Wii	2008	Racing	Nintendo	15.85	12.88	3.79	3.31	35.82
4	Wii Sports Resort	Wii	2009	Sports	Nintendo	15.75	11.01	3.28	2.96	33
5	Pokemon Red/Pokemon Blue	GB	1996	Role-Playing	Nintendo	11.27	8.89	10.22	1	31.37

Information

No object selected

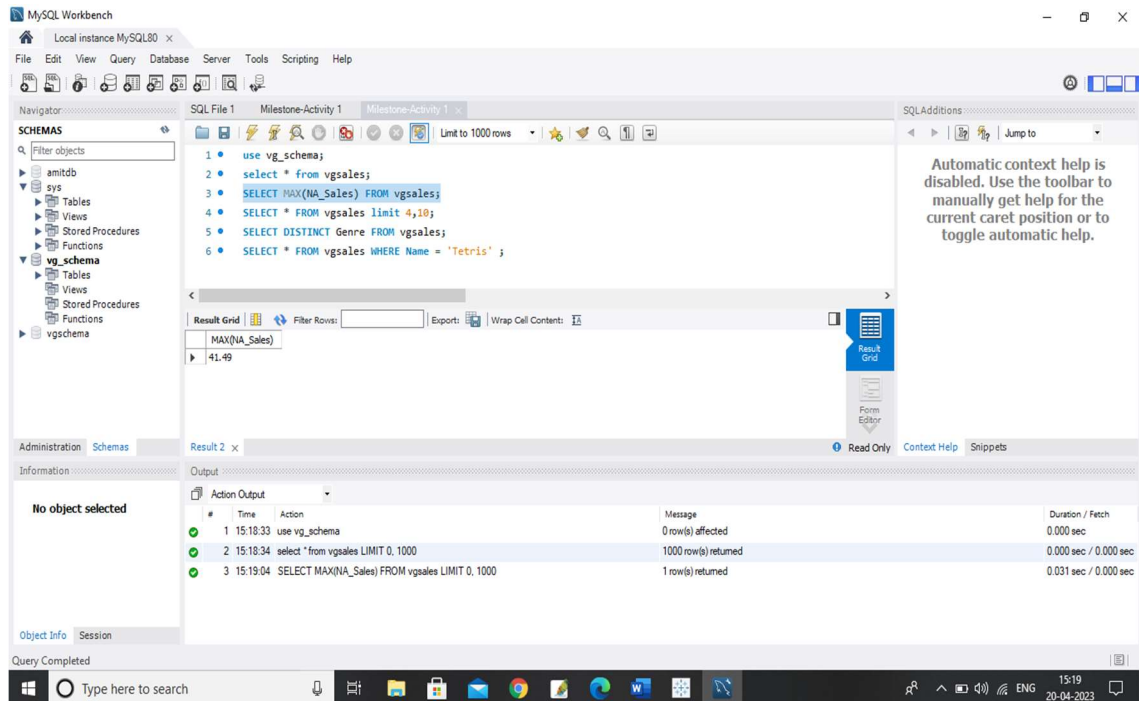
Action Output

#	Time	Action	Message	Duration / Fetch
1	15:18:33	use vg_schema	0 row(s) affected	0.000 sec
2	15:18:34	select * from vgsales limit 0, 1000	1000 row(s) returned	0.000 sec / 0.000 sec

Query Completed

Type here to search

15:18 20-04-2023



MySQL Workbench

Local instance MySQL80

File Edit View Query Database Server Tools Scripting Help

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Result Grid

MAX(NA_Sales)
41.49

Information

No object selected

Action Output

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3	15:19:04	SELECT MAX(NA_Sales) FROM vgsales limit 0, 1000	1 row(s) returned	0.031 sec / 0.000 sec

Query Completed

Type here to search

15:19 20-04-2023

MySQL Workbench

Local instance MySQL80 x

File Edit View Query Database Server Tools Scripting Help

Navigator

SCHEMAS

Filter objects

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SQL File 1 Milestone-Activity 1

Limit to 1000 rows

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1 use vg_schema;
2 select * from vgsales;
3 SELECT MAX(NA_Sales) FROM vgsales;
4 SELECT * FROM vgsales limit 4,10;
5 SELECT DISTINCT Genre FROM vgsales;
6 SELECT * FROM vgsales WHERE Name = 'Tetris' ;
```

Automatic context help is disabled. Use the toolbar to manually get help for the current caret position or to toggle automatic help.

Result Grid

Rank	Name	Platform	Year	Genre	Publisher	NA_Sales	EU_Sales	JP_Sales	Other_Sales	Global_Sale
5	Pokemon Red/Pokemon Blue	GB	1996	Role-Playing	Nintendo	11.27	8.89	10.22	1	31.37
6	Tetris	GB	1989	Puzzle	Nintendo	23.2	2.26	4.22	0.58	30.26
7	New Super Mario Bros.	DS	2006	Platform	Nintendo	11.38	9.23	6.5	2.9	30.01
8	Wii Play	Wii	2006	Misc	Nintendo	14.03	9.2	2.93	2.85	29.02
9	New Super Mario Bros. Wii	Wii	2009	Platform	Nintendo	14.59	7.06	4.7	2.26	28.62

Administration Schemas

Information

No object selected

Action Output

#	Time	Action	Message	Duration / Fetch
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3	15:19:04	SELECT MAX(NA_Sales) FROM vgsales LIMIT 0, 1000	1 row(s) returned	0.031 sec / 0.000 sec
4	15:19:24	SELECT * FROM vgsales limit 4, 10	10 row(s) returned	0.000 sec / 0.000 sec

Query Completed

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15:19 20-04-2023

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Result Grid

Genre
Sports
Platform
Racing
Role-Playing
Puzzle
Misc

Administration Schemas

Information

No object selected

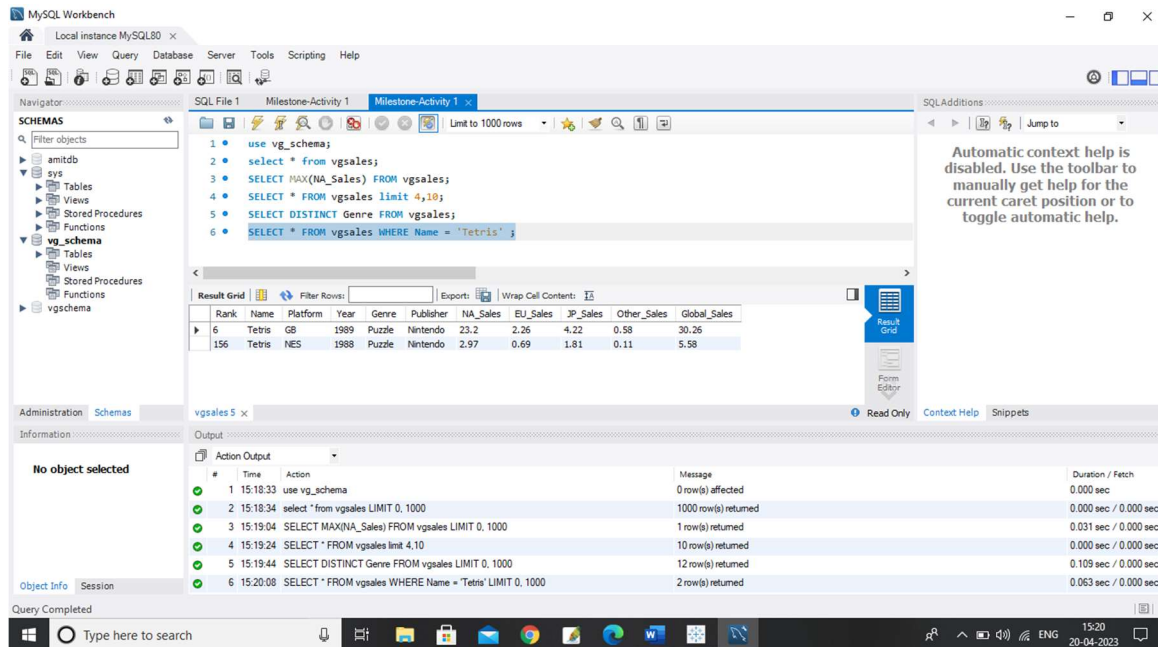
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3	15:19:04	SELECT MAX(NA_Sales) FROM vgsales LIMIT 0, 1000	1 row(s) returned	0.031 sec / 0.000 sec
4	15:19:24	SELECT * FROM vgsales limit 4, 10	10 row(s) returned	0.000 sec / 0.000 sec
5	15:19:44	SELECT DISTINCT Genre FROM vgsales LIMIT 0, 1000	12 row(s) returned	0.109 sec / 0.000 sec

Query Completed

Type here to search

15:19 20-04-2023



ADVANTAGES

Analysts measure available data to make better decisions when it comes to marketing, as well as understand the value of a game so it can be improved. In this way, data analysts/scientists help the gaming community in improving user experience and gaming companies to make better informed decisions.

DISADVANTAGES

The data's predictions can create an imbalance in the gaming team, and it can further be difficult to handle the situations. It does not always depend on the numbers. A gamer's mental or emotional state also matters when these transfers are made, which cannot be analyzed in systems.

APPLICATIONS

- ❖ Find Opportunities in Gaming industry
- ❖ Identify consumer trends
- ❖ Understand Gaming sales industry's

CONCLUSION

- ❖ It is best to opt for the games releasing in PC and also if you are looking for action games look for the publisher “Nintendo” as they have sold the highest number of games.
- ❖ The love for the video games was increasing exponentially till 2008 but it is gradually decreasing since then, this is due to the lack of creativity, awareness or interest. This is the reason why most of the games are sold in North America as compared to other parts of the world.
- ❖ Well, there are lots of efforts going into creating a single game and due to modern era mobile games other platforms are getting deprived of the attention which had created a lot of awesome experiences for gamers from 1980-2010.
- ❖ The top genres-Action, Sports and shooter majorly contributes towards a game being hit.
- ❖ The platform PS3 and X360 are among the top platform which contributes for making a hit game.

FUTURE SCOPE

- ❖ Combine the user reviews from social media and perform sentimental analysis.
- ❖ Combine the unit price data of the video which will help to analyse and predict the revenues of video game.
- ❖ Deep dive into the video game sales and marketing.
- ❖ To study and analyse how cloud based gaming complete with the console games.

APPENDIX

Source Code

Dashboard - [Dashboard - NiceAdmin Bootstrap Template](#)

Story 1 - [Dashboard - NiceAdmin Bootstrap Template](#)

Story 2 - [Dashboard - NiceAdmin Bootstrap Template](#)

Story 3 - [Dashboard - NiceAdmin Bootstrap Template](#)

Story 4 - [Dashboard - NiceAdmin Bootstrap Template](#)

Story 5 - [Dashboard - NiceAdmin Bootstrap Template](#)