```
import pandas as pd

import matplotlib.pyplot as plt
import seaborn as sns

sns.set_palette("pastel")

df = pd.read_csv(r'C:\Users\Vivek\Desktop\vgsales.csv')

df.head()
```

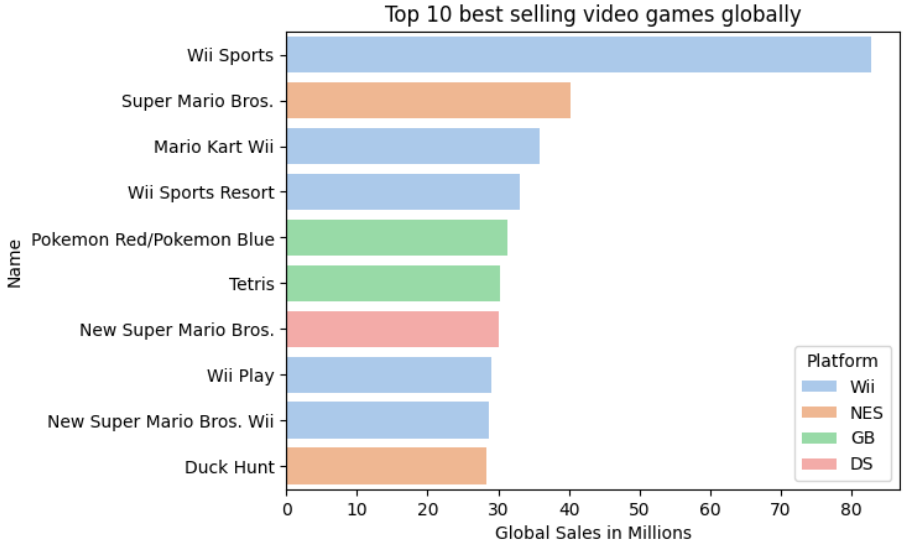
```
   Rank                      Name Platform    Year         Genre Publisher  \
0     1                Wii Sports      Wii  2006.0        Sports  Nintendo
1     2         Super Mario Bros.      NES  1985.0      Platform  Nintendo
2     3            Mario Kart Wii      Wii  2008.0        Racing  Nintendo
3     4         Wii Sports Resort      Wii  2009.0        Sports  Nintendo
4     5  Pokemon Red/Pokemon Blue       GB  1996.0  Role-Playing  Nintendo

   NA_Sales  EU_Sales  JP_Sales  Other_Sales  Global_Sales
0     41.49     29.02      3.77         8.46         82.74
1     29.08      3.58      6.81         0.77         40.24
2     15.85     12.88      3.79         3.31         35.82
3     15.75     11.01      3.28         2.96         33.00
4     11.27      8.89     10.22         1.00         31.37
```

Top 10 best selling video games globally

```
top_10_Games_Globally = df.sort_values(by='Global_Sales', ascending=False).head(10)

sns.barplot(data=top_10_Games_Globally, x='Global_Sales', y='Name', hue='Platform', dodge=Fa
plt.title("Top 10 best selling video games globally")
plt.xlabel("Global Sales in Millions")
plt.ylabel("Name")
plt.show()
```



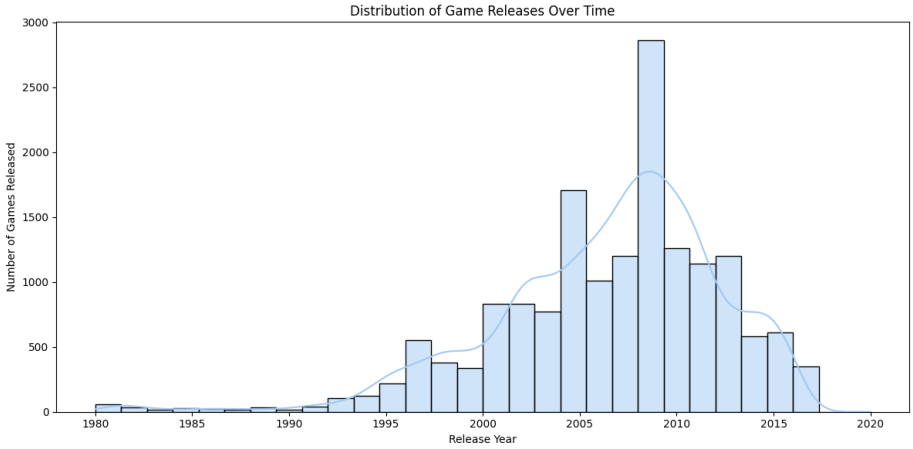
Distribution of games released across the years

```
year_dist = df['Year'].value_counts()
```

```
year_dist.head()
```

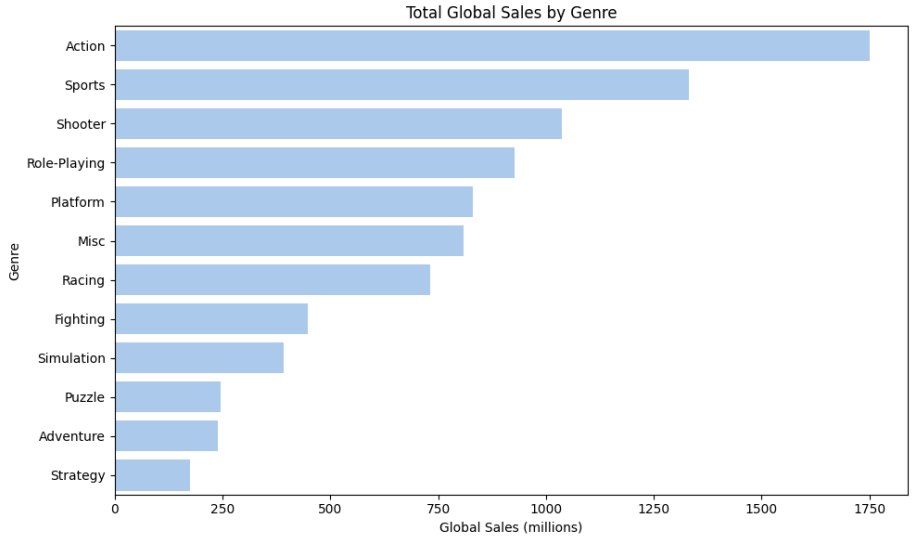
```
Year
2009.0    1431
2008.0    1428
2010.0    1259
2007.0    1202
2011.0    1139
Name: count, dtype: int64
```

```
plt.figure(figsize=(12, 6))
sns.histplot(df['Year'].dropna(), bins=30, kde=True)
plt.title("Distribution of Game Releases Over Time")
plt.xlabel("Release Year")
plt.ylabel("Number of Games Released")
plt.tight_layout()
plt.show()
```



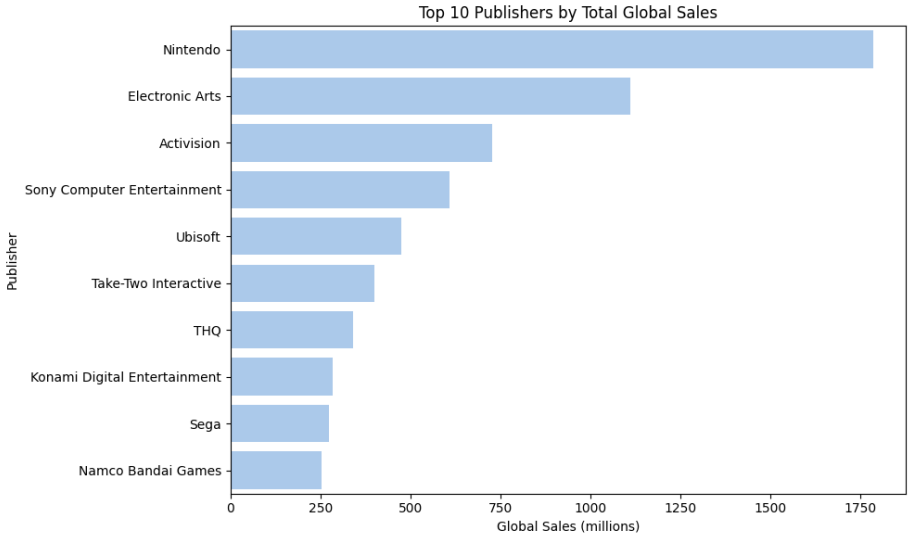
Total Sales by Genre

```
genre_sales = df.groupby("Genre")["Global_Sales"].sum().sort_values(ascending=False)
plt.figure(figsize=(10, 6))
sns.barplot(x=genre_sales.values, y=genre_sales.index)
plt.title("Total Global Sales by Genre")
plt.xlabel("Global Sales (millions)")
plt.ylabel("Genre")
plt.tight_layout()
plt.show()
```



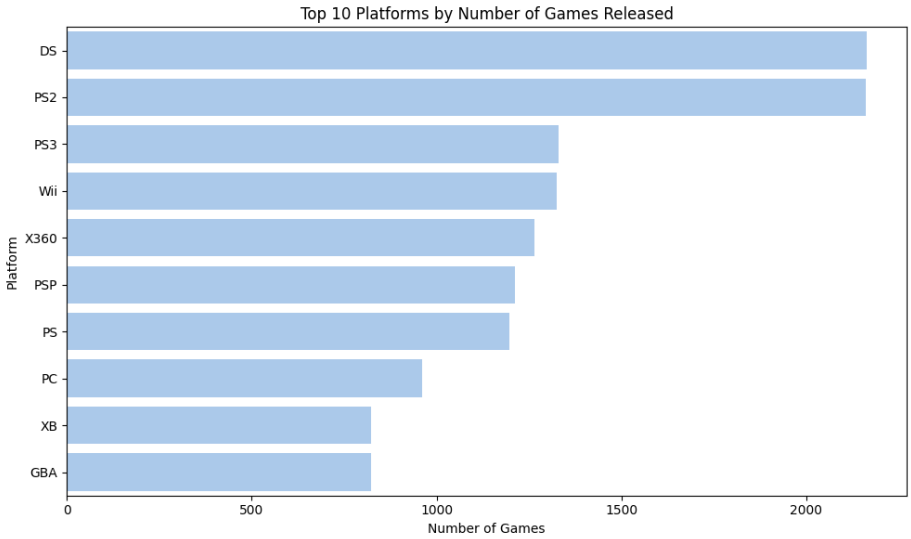
Top 10 Publishers by Total Global Sales

```
publisher_sales = df.groupby("Publisher")["Global_Sales"].sum().nlargest(10)
plt.figure(figsize=(10, 6))
sns.barplot(x=publisher_sales.values, y=publisher_sales.index)
plt.title("Top 10 Publishers by Total Global Sales")
plt.xlabel("Global Sales (millions)")
plt.ylabel("Publisher")
plt.tight_layout()
plt.show()
```



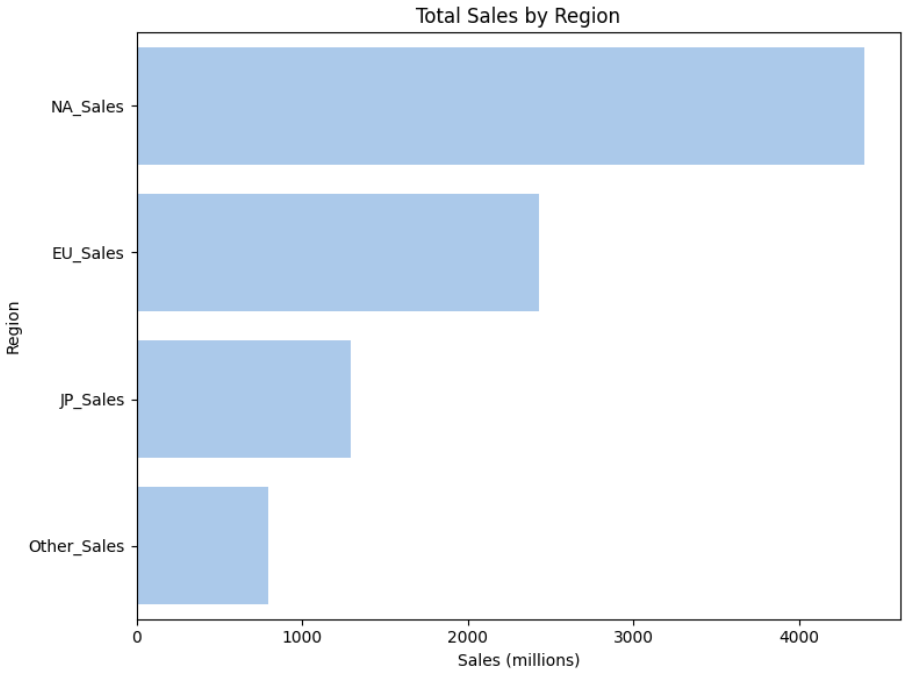
Top 10 platforms by numbers of games released

```
platform_counts = df["Platform"].value_counts().head(10)
plt.figure(figsize=(10, 6))
sns.barplot(x=platform_counts.values, y=platform_counts.index)
plt.title("Top 10 Platforms by Number of Games Released")
plt.xlabel("Number of Games")
plt.ylabel("Platform")
plt.tight_layout()
plt.show()
```



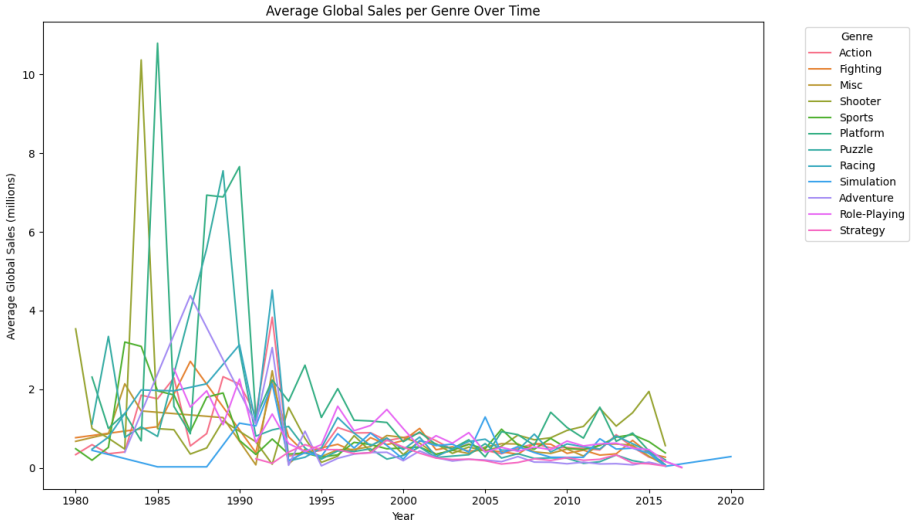
Total Sales by Region

```
regions = ["NA_Sales", "EU_Sales", "JP_Sales", "Other_Sales"]
region_sums = df[regions].sum().sort_values(ascending=False)
plt.figure(figsize=(8, 6))
sns.barplot(x=region_sums.values, y=region_sums.index)
plt.title("Total Sales by Region")
plt.xlabel("Sales (millions)")
plt.ylabel("Region")
plt.tight_layout()
plt.show()
```



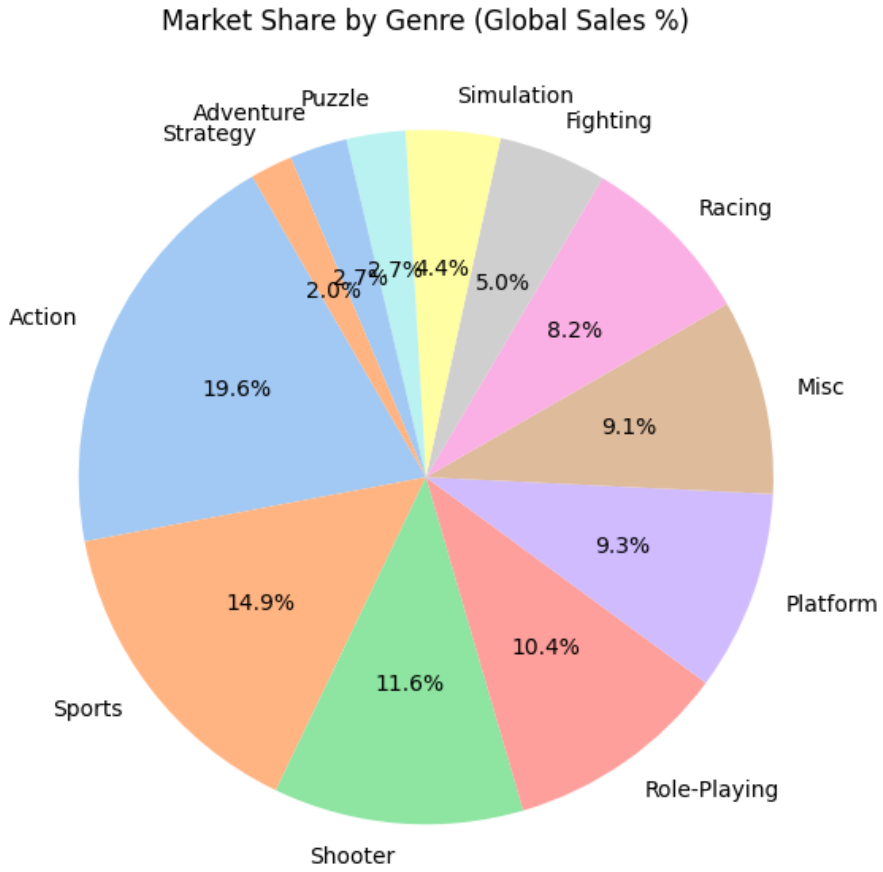
Genre Trends Over Time (Average Global Sales)

```
genre_year = df.dropna(subset=['Year']).groupby(['Year', 'Genre'])['Global_Sales'].mean().re
plt.figure(figsize=(12, 7))
sns.lineplot(data=genre_year, x='Year', y='Global_Sales', hue='Genre')
plt.title("Average Global Sales per Genre Over Time")
plt.xlabel("Year")
plt.ylabel("Average Global Sales (millions)")
plt.legend(title="Genre", bbox_to_anchor=(1.05, 1), loc='upper left')
plt.tight_layout()
plt.show()
```



Market Share by Genre

```
plt.figure(figsize=(6, 6))
genre_sales_pct = genre_sales / genre_sales.sum()
plt.pie(genre_sales_pct, labels=genre_sales_pct.index, autopct='%1.1f%%', startangle=120)
plt.title("Market Share by Genre (Global Sales %)")
plt.tight_layout()
plt.show()
```


Market Share by Genre (Global Sales %)
Action
19.6%
Sports
14.9%
Shooter
11.6%
Role-Playing
10.4%
Platform
9.3%
Misc
9.1%
Racing
8.2%
Fighting
5.0%
Simulation
4.4%
Puzzle
2.7%
Adventure
2.7%
Strategy
2.0%