

Streaming Data Analysis

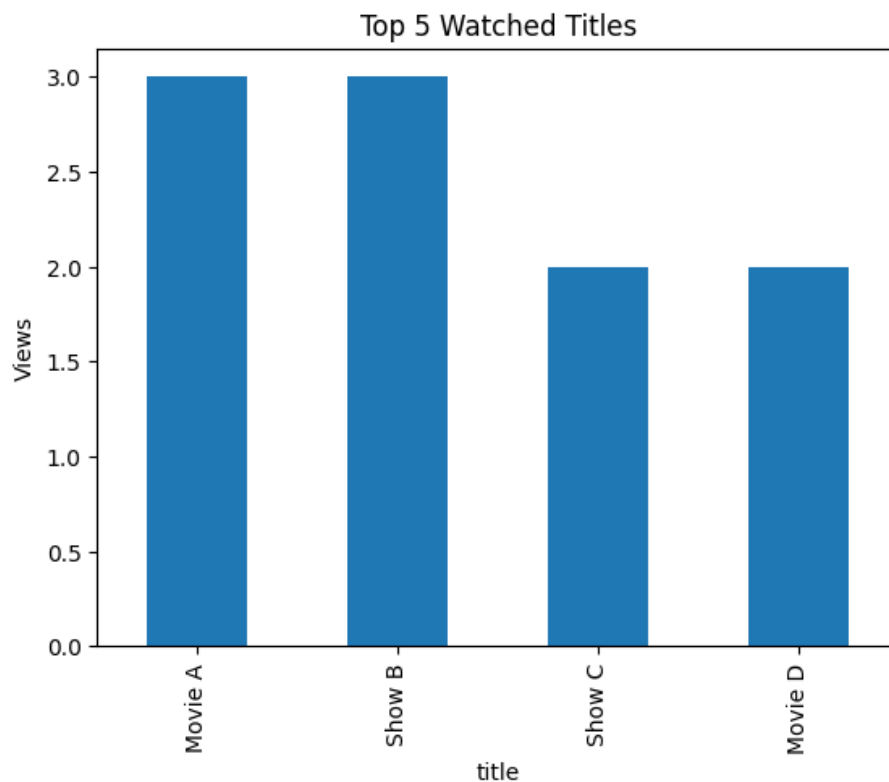
Top 5 Watched Titles

This chart displays the five most frequently watched titles, helping us understand viewer preferences. **Python Code:**

```
import pandas as pd
import matplotlib.pyplot as plt

# Load the dataset
df = pd.read_csv("sample_streaming_data.csv")

# Plot Top 5 Watched Titles
df['title'].value_counts().head(5).plot(kind='bar', title="Top 5 Watched Titles")
plt.ylabel("Views")
plt.show()
```



Watch Time by Genre

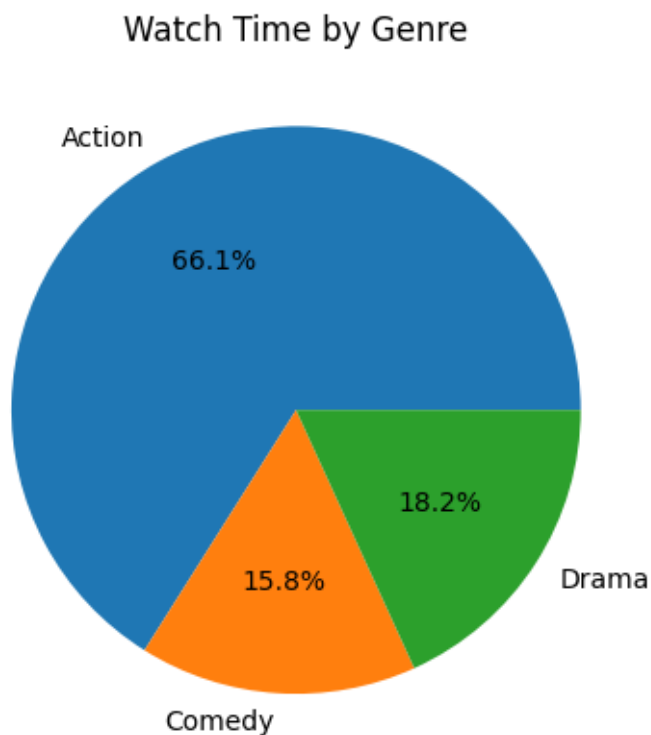
The pie chart shows how total watch time is distributed across different genres.

Python Code:

```
import pandas as pd
import matplotlib.pyplot as plt

# Load the dataset
df = pd.read_csv("sample_streaming_data.csv")

# Pie Chart: Watch Time by Genre
df.groupby('genre')['watch_time'].sum().plot(kind='pie',
autopct='%1.1f%%') plt.title("Watch Time by Genre")
plt.ylabel("") plt.show()
```



Monthly Watch Time Trend

This line plot illustrates how user watch time varies from month to month.

Python Code:

```
import pandas as pd
import matplotlib.pyplot as plt

# Load the dataset
df = pd.read_csv("sample_streaming_data.csv")
df['date'] = pd.to_datetime(df['date'])

# Monthly Watch Time Trend
monthly_trend = df.groupby(df['date'].dt.to_period('M'))['watch_time'].sum()
monthly_trend.index = monthly_trend.index.to_timestamp()
monthly_trend.plot(kind='line', marker='o',
title="Monthly Watch Time") plt.ylabel("Minutes")
plt.xlabel("Month") plt.grid(True) plt.show()
```

