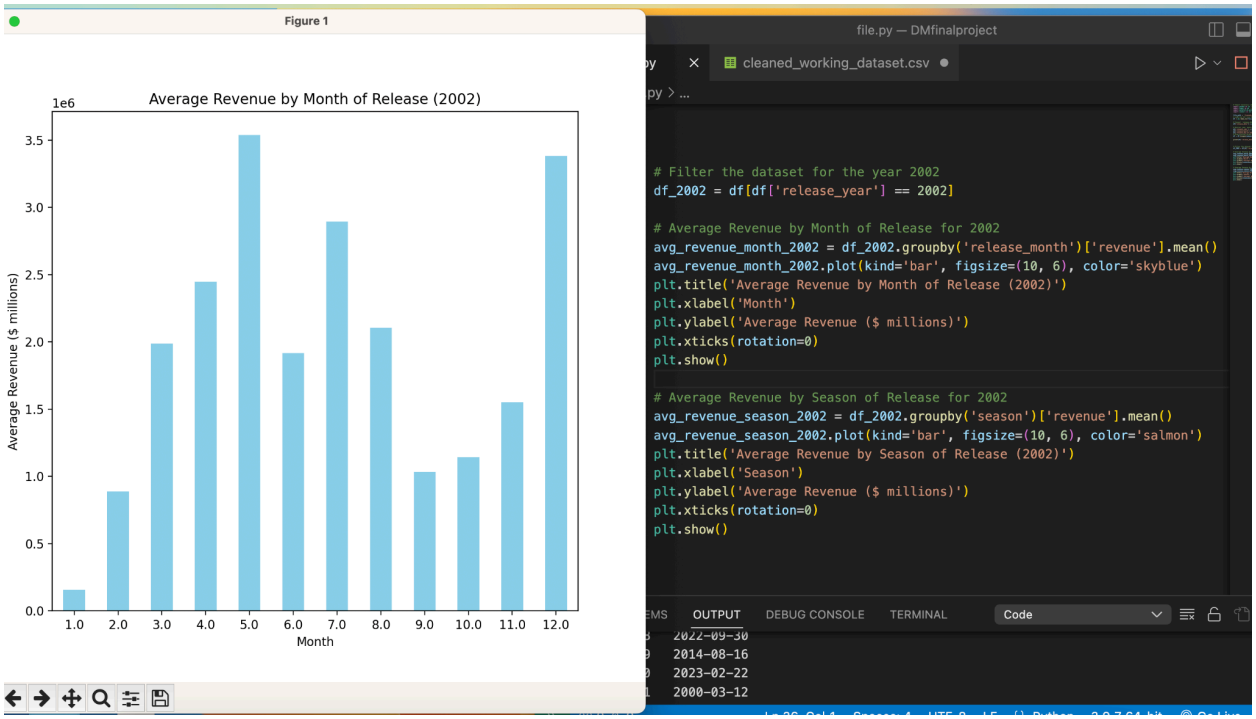
This visualization displays the total revenue generated by movies for each month of the year 2002. The chart allows for interactive filtering by year, enabling users to observe patterns and trends in movie releases and revenue across different time periods. One observation is that, when adjusting the filter to view other years within the 2000s, there is a consistent pattern of a high volume of movie releases compared to other decades. This suggests that the 2000s may have been a particularly significant era for movie production and releases.

It is important to note that there are no seasonal features included in the dataset used for this analysis. Therefore, any references to "average season" is disregarded, as seasonal trends were not directly factored into this analysis. The focus remains on the relationship between the month, year, and revenue, offering insights into which periods of the year tend to generate the most revenue for the film industry.



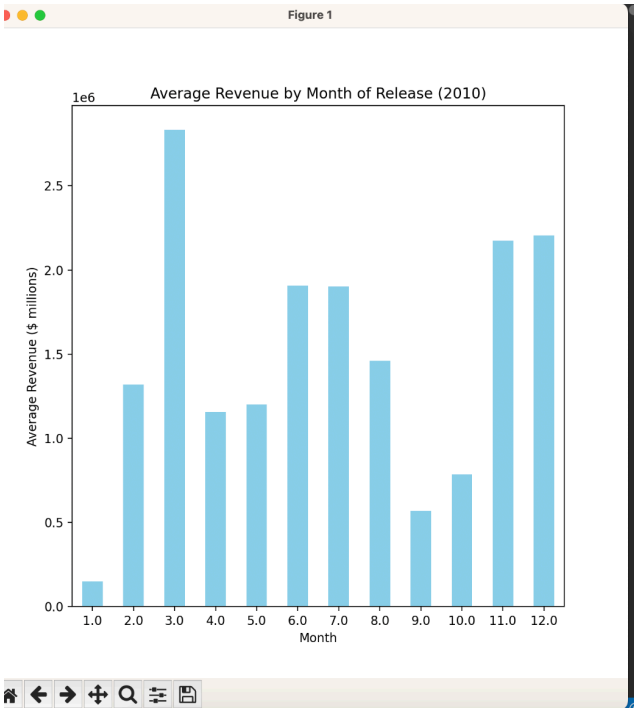
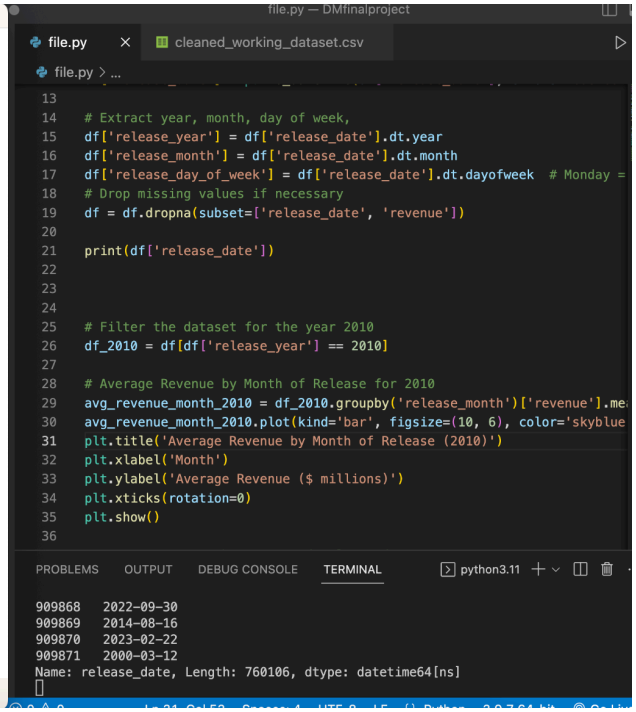


Figure 1
Average Revenue by Month of Release (2010)
1e6
Average Revenue ($ millions)
Month
0.0
0.5
1.0
1.5
2.0
2.5
1.0
2.0
3.0
4.0
5.0
6.0
7.0
8.0
9.0
10.0
11.0
12.0


file.py — DMfinalproject
file.py
cleaned_working_dataset.csv
file.py > ...
13
14 # Extract year, month, day of week,
15 df['release_year'] = df['release_date'].dt.year
16 df['release_month'] = df['release_date'].dt.month
17 df['release_day_of_week'] = df['release_date'].dt.dayofweek # Monday =
18 # Drop missing values if necessary
19 df = df.dropna(subset=['release_date', 'revenue'])
20
21 print(df['release_date'])
22
23
24
25 # Filter the dataset for the year 2010
26 df_2010 = df[df['release_year'] == 2010]
27
28 # Average Revenue by Month of Release for 2010
29 avg_revenue_month_2010 = df_2010.groupby('release_month')['revenue'].me
30 avg_revenue_month_2010.plot(kind='bar', figsize=(10, 6), color='skyblue
31 plt.title('Average Revenue by Month of Release (2010)')
32 plt.xlabel('Month')
33 plt.ylabel('Average Revenue ($ millions)')
34 plt.xticks(rotation=0)
35 plt.show()
36
PROBLEMS
OUTPUT
DEBUG CONSOLE
TERMINAL
python3.11
909868 2022-09-30
909869 2014-08-16
909870 2023-02-22
909871 2000-03-12
Name: release_date, Length: 760106, dtype: datetime64[ns]