

# DATA PREPROCESSING

## Import libraries

```
In [1]: import numpy as np
import pandas as pd
import matplotlib.pyplot as plt
import seaborn as sns
import re

import statsmodels.api as sm
from sklearn.model_selection import train_test_split
from sklearn.linear_model import LinearRegression
import sklearn.metrics as metrics
from sklearn.model_selection import cross_val_score
```

## Import datasets

```
In [2]: schedule_data = pd.read_csv("C:\\\\Users\\\\moneesh.basker\\\\Desktop\\\\Regression\\\\Assignment-2\\\\schedule_data.csv")
#schedule_data.head()
meta_data = pd.read_csv("C:\\\\Users\\\\moneesh.basker\\\\Desktop\\\\Regression\\\\Assignment-2\\\\meta_data.csv")
#meta_data.head()
```

## Merging Datasets

```
In [3]: df = pd.merge(schedule_data, meta_data, how='left', on='ASSET_ID')
```

```
In [4]: df.shape
```

```
Out[4]: (2517, 30)
```

## Missing & Duplicate data

```
In [5]: df.isna().sum()
```

```
Out[5]: ASSET_ID          0
AIRING_START_DATE_TIME    0
AIRING_END_DATE_TIME      0
PREMIER_AIRING            0
EXHIBITION_AIRING         0
FREE_AIRING                0
SCHEDULED_RUNTIME          0
DAY_PART                    0
AIRING_REVENUE              0
C3_RATING                  8
RELEASE_YEAR                0
MPAA_RATING                 30
GENRE                      0
IMDB_RATING                 0
IMDB_RANKING                577
IMDB_VOTES                  0
Oscar-Nomination             0
Oscar-Wins                   0
Other - Nominations           0
Other - Wins                   0
TOMATO_METER                 161
TOMATO_RATING                 161
TOMATO_REVIEWS                161
TOMATO_FRESH                  161
TOMATO_ROTEN                  161
TOMATO_USER_METER               79
TOMATO_USER_RATINGS              50
TOMATO_USER_REVIEWS              50
TOMATO_IMAGE                   161
BOX_OFFICE_EARNINGS            1479
dtype: int64
```

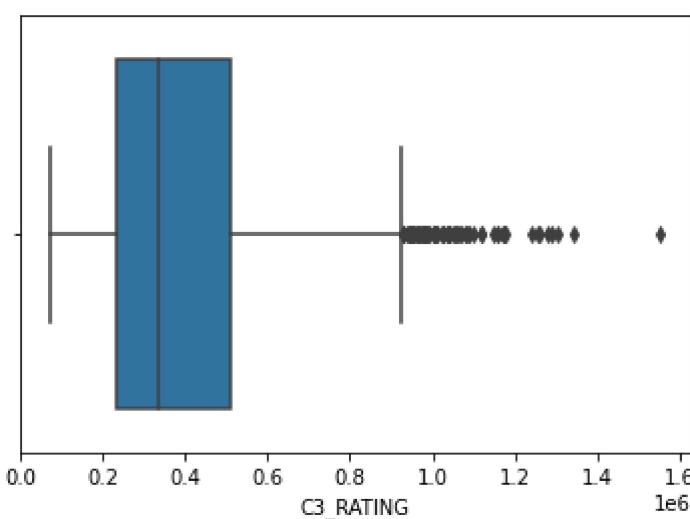
```
In [6]: df.duplicated().sum()
```

```
Out[6]: 0
```

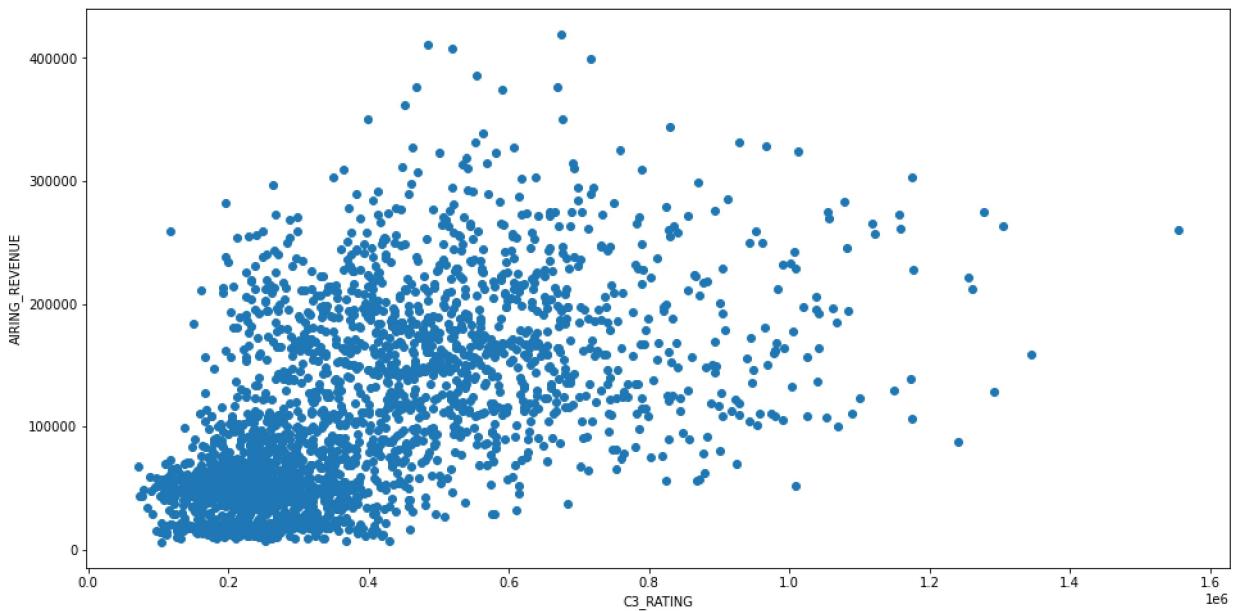
```
In [7]: df.drop(['AIRING_START_DATE_TIME', 'AIRING_END_DATE_TIME'], axis=1, inplace=True)
```

```
In [8]: sns.boxplot(x=df['C3_RATING'])
```

```
Out[8]: <AxesSubplot:xlabel='C3_RATING'>
```

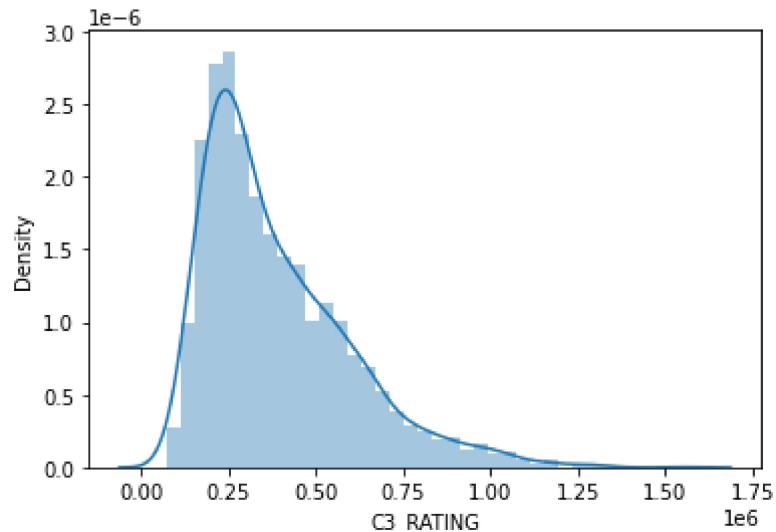


```
In [9]: fig, ax = plt.subplots(figsize=(16,8))
ax.scatter(df['C3_RATING'], df['AIRING_REVENU'])
ax.set_xlabel('C3_RATING')
ax.set_ylabel('AIRING_REVENU')
plt.show()
```



```
In [10]: sns.distplot(df['C3_RATING'])
plt.show()
```

C:\Users\moneesh.basker\Anaconda3\lib\site-packages\seaborn\distributions.py:2619: FutureWarning: `distplot` is a deprecated function and will be removed in a future version. Please adapt your code to use either `displot` (a figure-level function with similar flexibility) or `histplot` (an axes-level function for histograms).  
warnings.warn(msg, FutureWarning)



```
In [11]: df['C3_RATING'].describe()
```

```
Out[11]: count    2.509000e+03
          mean     3.905997e+05
          std      2.127546e+05
          min      7.152900e+04
          25%     2.315390e+05
          50%     3.329190e+05
          75%     5.091160e+05
          max      1.553844e+06
          Name: C3_RATING, dtype: float64
```

```
In [12]: df.MPAA_RATING.unique()
```

```
Out[12]: array(['PG-13', 'R', 'PG', 'nan', 'APPROVED', 'G', 'NOT RATED', 'UNRATED',
       'X', 'M', 'GP'], dtype=object)
```

```
In [13]: df.MPAA_RATING.value_counts()
```

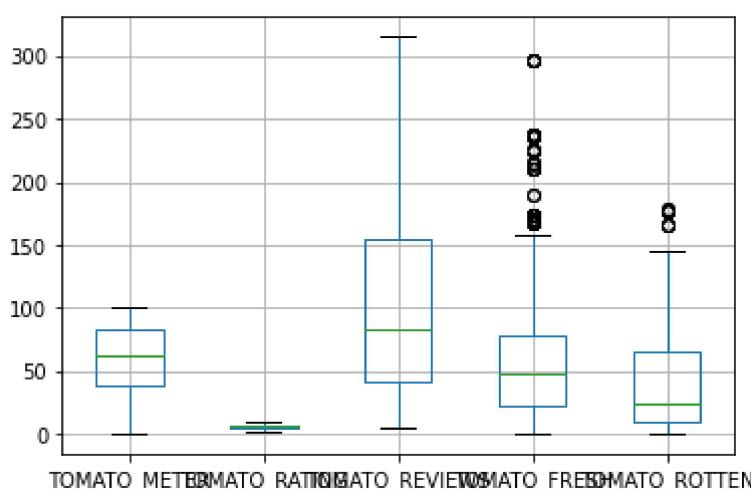
```
Out[13]: R           1131
          PG-13        905
          PG            343
          G             41
          APPROVED      30
          NOT RATED     15
          X              13
          UNRATED        5
          M              3
          GP             1
          Name: MPAA_RATING, dtype: int64
```

```
In [14]: df.TOMATO_IMAGE.value_counts()
```

```
Out[14]: rotten      1142
          certified   725
          fresh        489
          Name: TOMATO_IMAGE, dtype: int64
```

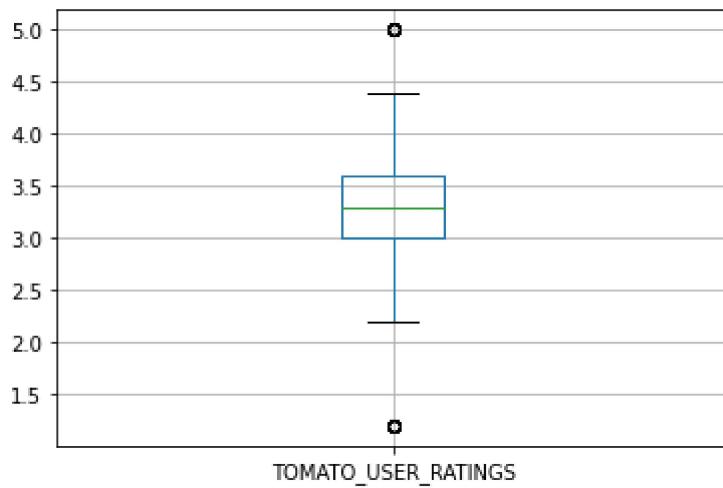
```
In [15]: df.boxplot(column=["TOMATO_METER", "TOMATO_RATING", "TOMATO_REVIEWS", "TOMATO_FRESH", "TOMATO_ROTEN"])
```

```
Out[15]: <AxesSubplot:>
```



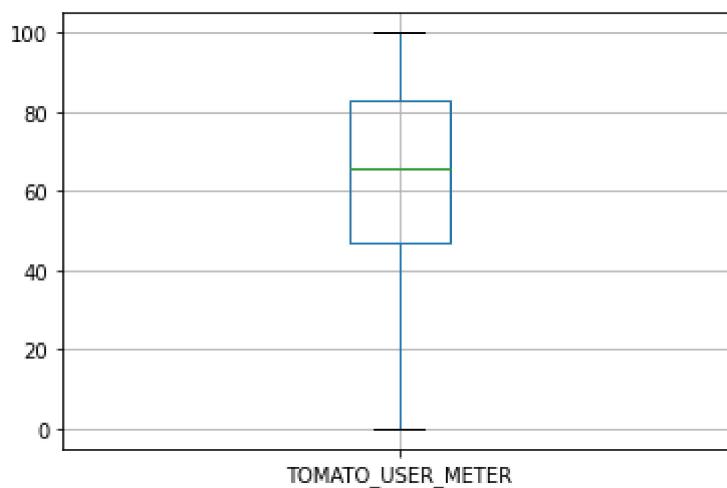
```
In [16]: df.boxplot(column=["TOMATO_USER_RATINGS"])
```

```
Out[16]: <AxesSubplot:>
```



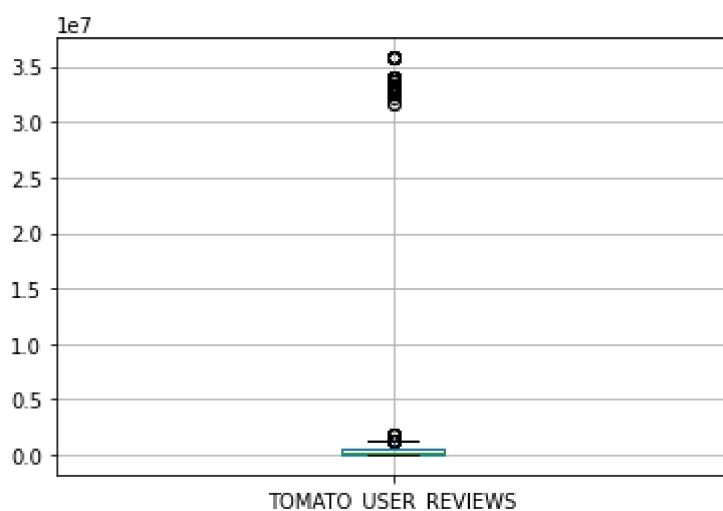
```
In [17]: df.boxplot(column=["TOMATO_USER_METER"])
```

```
Out[17]: <AxesSubplot:>
```



```
In [18]: df.boxplot(column=["TOMATO_USER_REVIEWS"])
```

```
Out[18]: <AxesSubplot:>
```



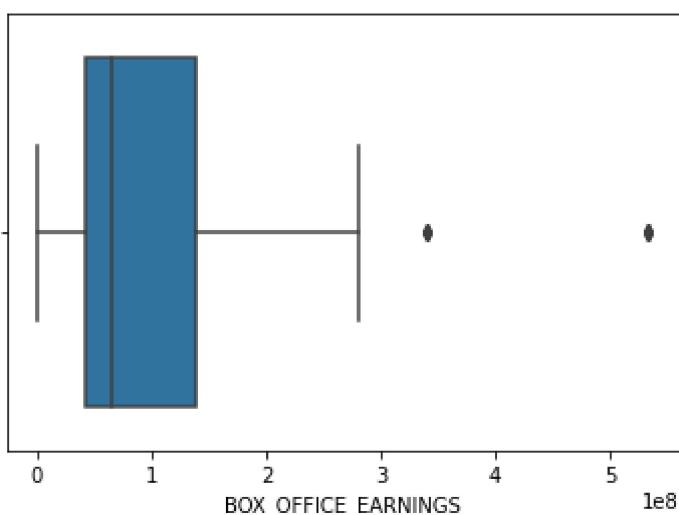
```
In [19]: df.loc[df['BOX_OFFICE_EARNINGS'].notna(),'BOX_OFFICE_EARNINGS'] = df.loc[df['BOX_OFFICE_EARNINGS'] = pd.to_numeric(df['BOX_OFFICE_EARNINGS'])]
```

```
sns.boxplot(x=df['BOX_OFFICE_EARNINGS'])
```

C:\Users\moneesh.basker\AppData\Local\Temp\ipykernel\_1736\295017525.py:1: FutureWarning: The default value of regex will change from True to False in a future version. In addition, single character regular expressions will \*not\* be treated as literal strings when regex=True.

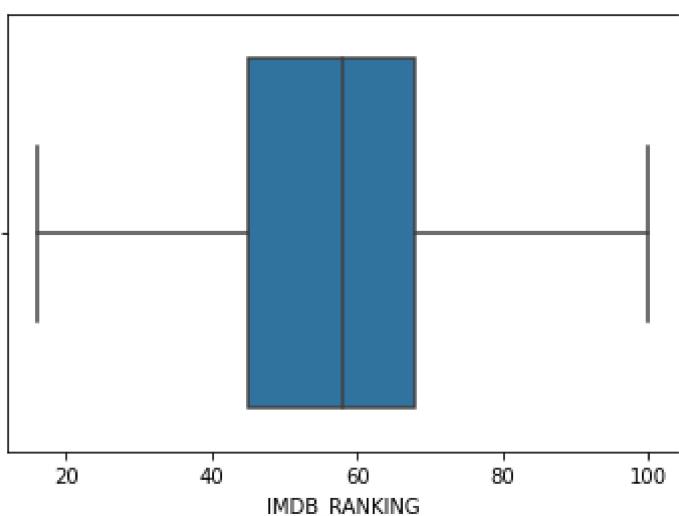
```
df.loc[df['BOX_OFFICE_EARNINGS'].notna(),'BOX_OFFICE_EARNINGS'] = df.loc[df['BOX_OFFICE_EARNINGS'].notna(),'BOX_OFFICE_EARNINGS'].str.replace(',',' ').str.replace('$','').astype(int)
```

Out[19]: <AxesSubplot:xlabel='BOX\_OFFICE\_EARNINGS'>



In [20]: `sns.boxplot(x=df['IMDB_RANKING'])`

Out[20]: <AxesSubplot:xlabel='IMDB\_RANKING'>



In [21]: #Handling Missing Data

```
df['C3_RATING'] = df['C3_RATING'].fillna(df['C3_RATING'].median())
df['MPAA_RATING'] = df['MPAA_RATING'].fillna('NOT RATED')
df['TOMATO_IMAGE'] = df['TOMATO_IMAGE'].fillna(df['TOMATO_IMAGE'].mode()[0])
df['TOMATO_METER'] = df['TOMATO_METER'].fillna(df['TOMATO_METER'].mean())
df['TOMATO_RATING'] = df['TOMATO_RATING'].fillna(df['TOMATO_RATING'].mean())
df['TOMATO_FRESH'] = df['TOMATO_FRESH'].fillna(df['TOMATO_FRESH'].median())
df['TOMATO_ROTTEN'] = df['TOMATO_ROTTEN'].fillna(df['TOMATO_ROTTEN'].median())
df['TOMATO_REVIEWS'] = df['TOMATO_REVIEWS'].fillna(df['TOMATO_REVIEWS'].mean())
df['TOMATO_USER_METER'] = df['TOMATO_USER_METER'].fillna(df['TOMATO_USER_METER'].mean())
```

```
df['TOMATO_USER_RATINGS'] = df['TOMATO_USER_RATINGS'].fillna(df['TOMATO_USER_RATINGS'])
df['TOMATO_USER_REVIEWS'] = df['TOMATO_USER_REVIEWS'].fillna(df['TOMATO_USER_REVIEWS'])
df['BOX_OFFICE_EARNINGS'] = df['BOX_OFFICE_EARNINGS'].fillna(df['BOX_OFFICE_EARNINGS'].mean())
df['IMDB_RANKING'] = df['IMDB_RANKING'].fillna(df['IMDB_RANKING'].mean())
```

In [22]: `df.isna().sum()`

Out[22]:

ASSET_ID	0
PREMIER_AIRING	0
EXHIBITION_AIRING	0
FREE_AIRING	0
SCHEDULED_RUNTIME	0
DAY_PART	0
AIRING_REVENUE	0
C3_RATING	0
RELEASE_YEAR	0
MPAA_RATING	0
GENRE	0
IMDB_RATING	0
IMDB_RANKING	0
IMDB_VOTES	0
Oscar-Nomination	0
Oscar-Wins	0
Other - Nominations	0
Other - Wins	0
TOMATO_METER	0
TOMATO_RATING	0
TOMATO_REVIEWS	0
TOMATO_FRESH	0
TOMATO_ROTEN	0
TOMATO_USER_METER	0
TOMATO_USER_RATINGS	0
TOMATO_USER_REVIEWS	0
TOMATO_IMAGE	0
BOX_OFFICE_EARNINGS	0

dtype: int64

## Handling Datatypes

In [23]: `df.dtypes`

```
Out[23]:
```

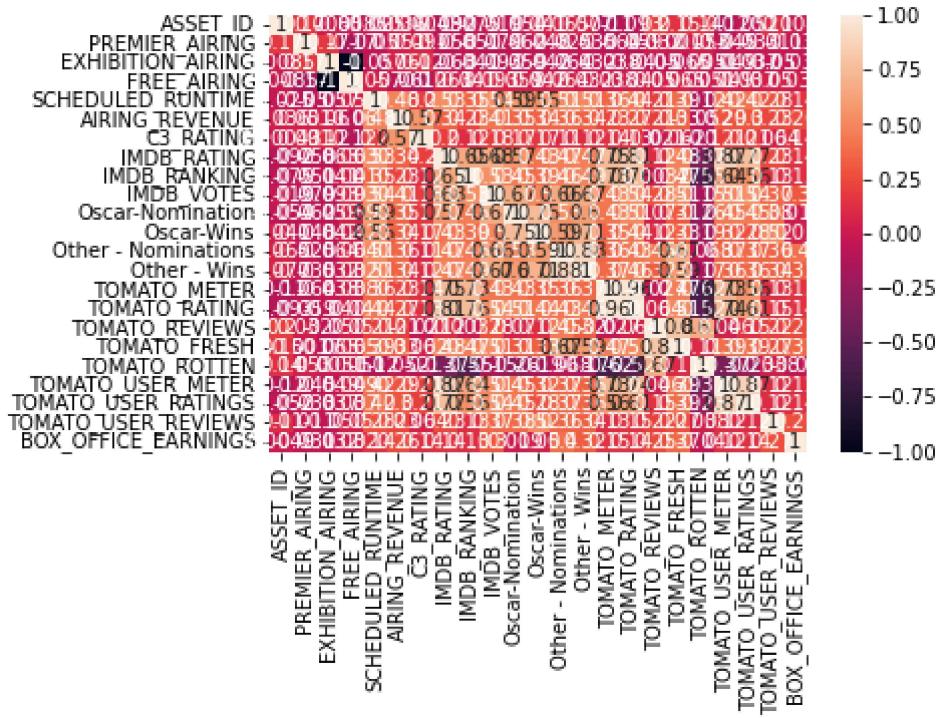
ASSET_ID	int64
PREMIER_AIRING	int64
EXHIBITION_AIRING	int64
FREE_AIRING	int64
SCHEDULED_RUNTIME	int64
DAY_PART	object
AIRING_REVENUE	int64
C3_RATING	float64
RELEASE_YEAR	float64
MPAA_RATING	object
GENRE	object
IMDB_RATING	float64
IMDB_RANKING	float64
IMDB_VOTES	object
Oscar-Nomination	int64
Oscar-Wins	int64
Other - Nominations	int64
Other - Wins	int64
TOMATO_METER	float64
TOMATO_RATING	float64
TOMATO_REVIEWS	float64
TOMATO_FRESH	float64
TOMATO_ROTTEN	float64
TOMATO_USER_METER	float64
TOMATO_USER_RATINGS	float64
TOMATO_USER_REVIEWS	float64
TOMATO_IMAGE	object
BOX_OFFICE_EARNINGS	float64
dtype:	object

```
In [24]: df["RELEASE_YEAR"] = pd.to_datetime(df.RELEASE_YEAR, format='%Y')
df["IMDB_VOTES"] = df["IMDB_VOTES"].str.replace(',', '')
df["IMDB_VOTES"] = pd.to_numeric(df["IMDB_VOTES"])
```

## Some plots to understand the data

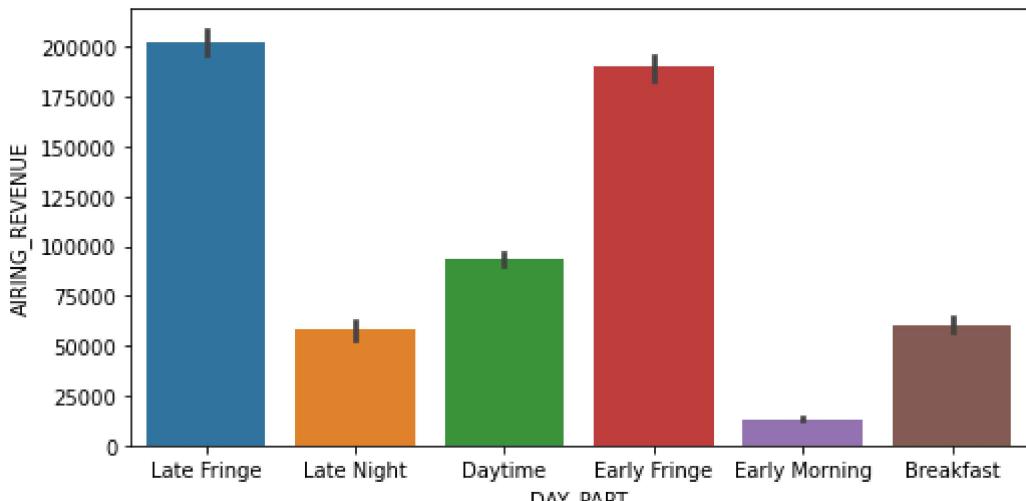
```
In [25]: corelation = df.corr()
sns.heatmap(corelation, xticklabels=corelation.columns, yticklabels=corelation.columns)

Out[25]: <AxesSubplot:>
```



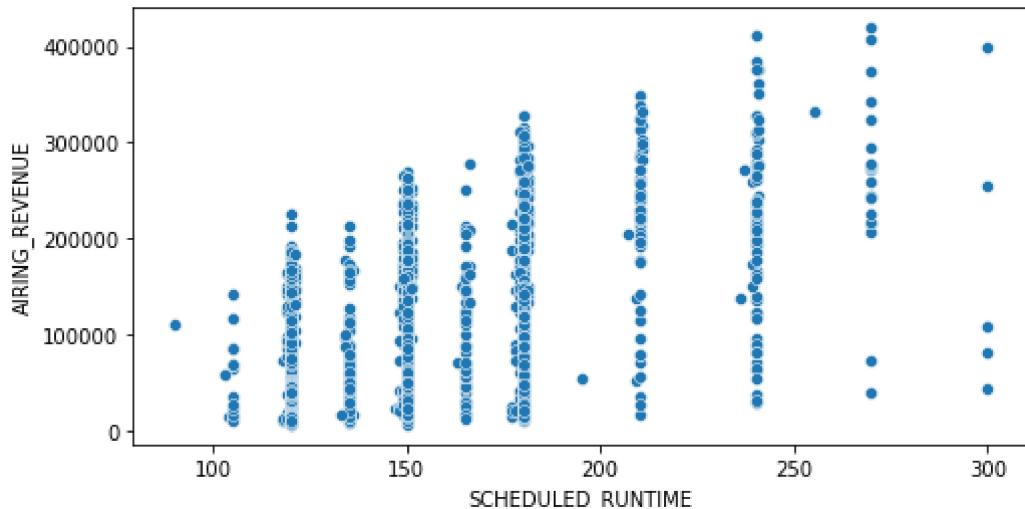
```
In [26]: plt.figure(figsize = (8,4))
sns.barplot(x='DAY_PART',y='AIRING_REVENUE',data=df)
#obvious categories that produce more revenue are Late Fringe and Early Fringe the time
```

```
Out[26]: <AxesSubplot:xlabel='DAY_PART', ylabel='AIRING_REVENUE'>
```



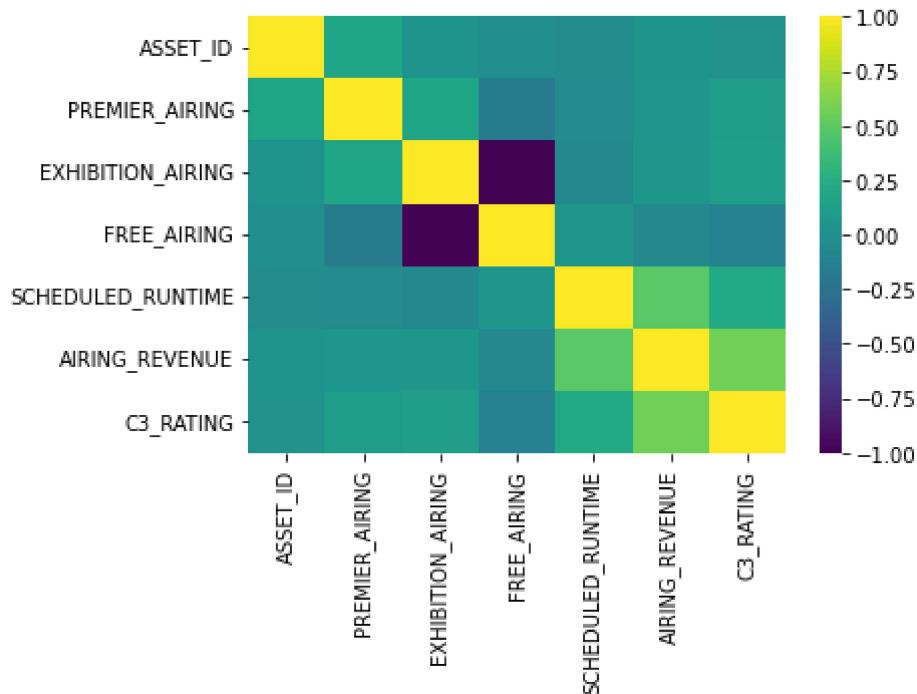
```
In [27]: plt.figure(figsize = (8,4))
sns.scatterplot(x='SCHEDULED_RUNTIME',y='AIRING_REVENUE',data=df)
```

```
Out[27]: <AxesSubplot:xlabel='SCHEDULED_RUNTIME', ylabel='AIRING_REVENUE'>
```



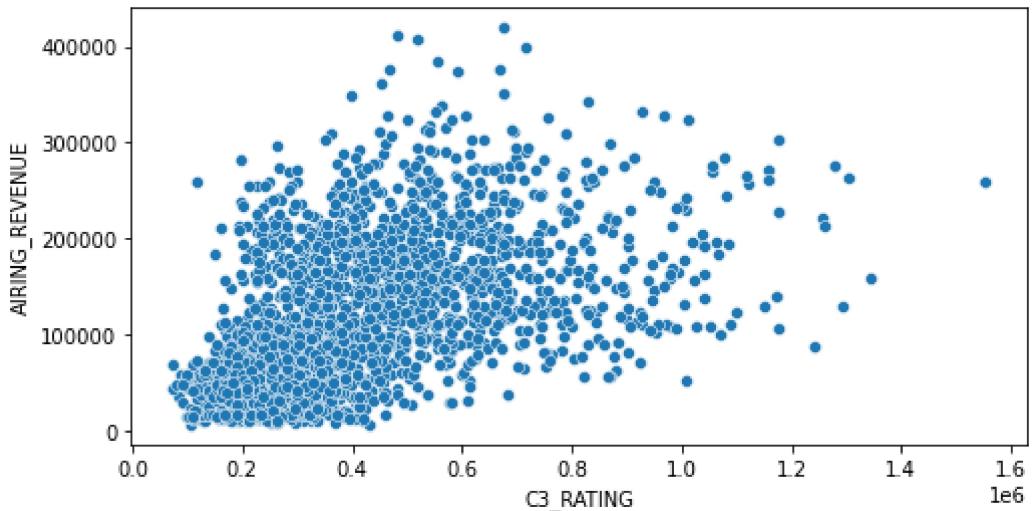
```
In [28]: sns.heatmap(schedule_data.corr(), cmap = 'viridis')
#free_airing and exhibition airing exhibits neg correlation
```

Out[28]: <AxesSubplot:>



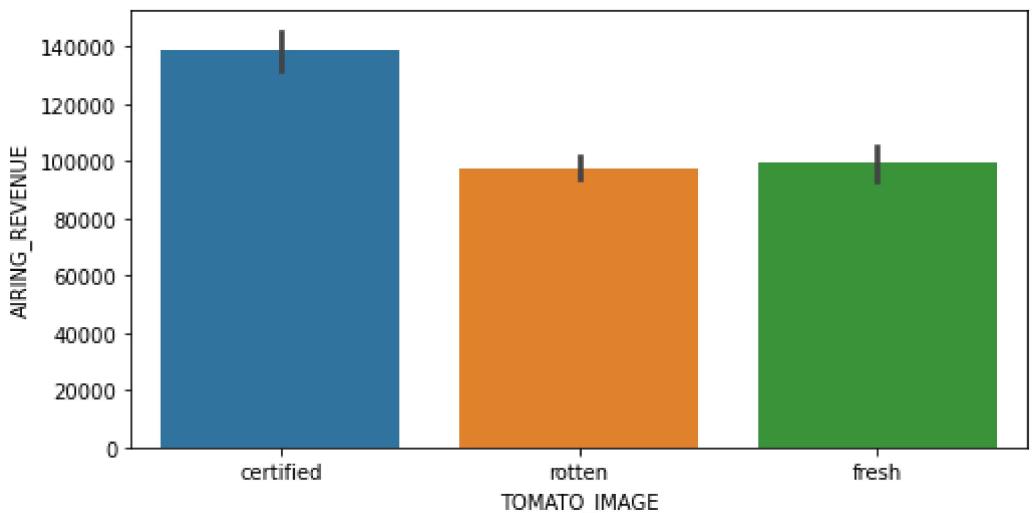
```
In [29]: plt.figure(figsize = (8,4))
sns.scatterplot(x='C3_RATING',y='AIRING_REVENUE',data=df)
```

Out[29]: <AxesSubplot:xlabel='C3\_RATING', ylabel='AIRING\_REVENUE'>



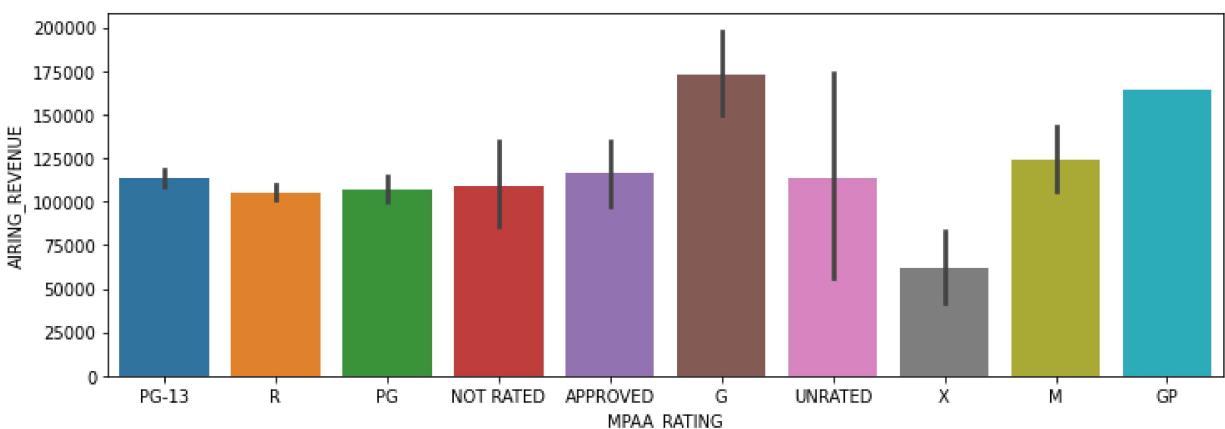
```
In [30]: plt.figure(figsize = (8,4))
sns.barplot(x='TOMATO_IMAGE',y='AIRING_REVENUE',data = df)
```

```
Out[30]: <AxesSubplot:xlabel='TOMATO_IMAGE', ylabel='AIRING_REVENUE'>
```



```
In [31]: plt.figure(figsize = (12,4))
sns.barplot(x='MPAA_RATING',y='AIRING_REVENUE',data = df)
```

```
Out[31]: <AxesSubplot:xlabel='MPAA_RATING', ylabel='AIRING_REVENUE'>
```



# Handling Categorical variables

```
In [32]: genre = df['GENRE'].to_list()
split_genre = [re.split(',', item) for item in genre]
ug = list(set(x for item in split_genre for x in item))
ug.sort()
ug
```

```
Out[32]: ['Action',
 'Adventure',
 'Biography',
 'Comedy',
 'Crime',
 'Documentary',
 'Drama',
 'Family',
 'Fantasy',
 'History',
 'Horror',
 'Music',
 'Musical',
 'Mystery',
 'Romance',
 'Sci-Fi',
 'Short',
 'Sport',
 'Thriller',
 'War',
 'Western']
```

```
In [33]: gen_encode = np.zeros((df.shape[0],len(ug)))
for x in range(df.shape[0]):
    for y in range(len(ug)):
        if ug[y] in split_genre[x]:
            gen_encode[x][y]=1
gen_encode = pd.DataFrame(gen_encode,columns = ug)
gen_encode
```

Out[33]:

	Action	Adventure	Biography	Comedy	Crime	Documentary	Drama	Family	Fantasy	Histo
0	0.0	0.0	0.0	1.0	1.0	0.0	0.0	0.0	0.0	0
1	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
2	1.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0
3	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
4	1.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
...	...	...	...	...	...	...	...	...	...	...
2512	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0
2513	0.0	0.0	0.0	0.0	1.0	0.0	1.0	0.0	0.0	0
2514	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	1.0	0
2515	0.0	1.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0
2516	0.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0

2517 rows × 21 columns

In [34]: df = pd.concat([df, gen\_encode], axis=1)  
del df['GENRE']

In [35]: df

Out[35]:

	ASSET_ID	Premier_Airing	Exhibition_Airing	Free_Airing	Scheduled_Runtime	Day_Pa	...
0	174543	0	1	0	150	Late Fri	
1	181758	0	0	1	180	Late Ni	
2	191074	0	1	0	120	Dayti	
3	196156	1	1	0	180	E Fri	
4	174201	0	0	1	120	Dayti	
...	...	...	...	...	...	...	...
2512	185554	0	1	0	150	Late Ni	
2513	171859	0	1	0	150	Break	
2514	171986	0	1	0	150	Dayti	
2515	185461	0	0	1	135	Dayti	
2516	188621	0	0	1	180	Dayti	

2517 rows × 48 columns

```
In [36]: cat_cols = ["ASSET_ID", "DAY_PART", "RELEASE_YEAR", "MPAA_RATING", "TOMATO_IMAGE"]
df1 = pd.get_dummies(df, columns=cat_cols, drop_first=True)
```

```
In [37]: df1.head()
```

Out[37]:

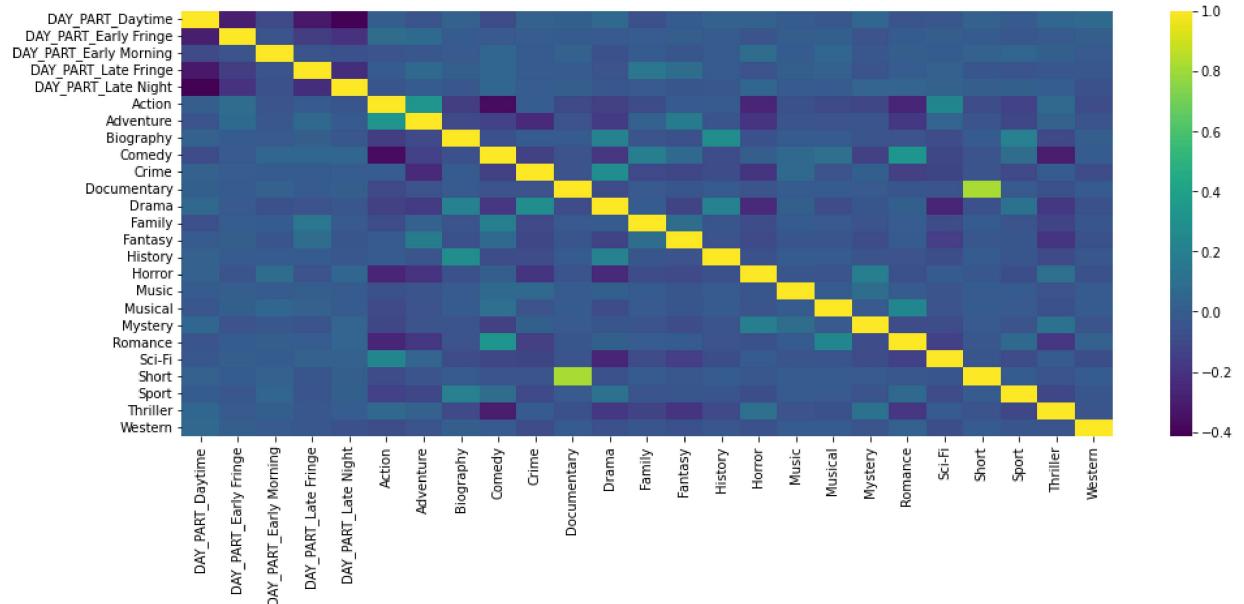
	PREMIER_AIRING	EXHIBITION_AIRING	FREE_AIRING	SCHEDULED_RUNTIME	AIRING_REVENUE	C3
0	0	1	0	150	197840	
1	0	0	1	180	89818	
2	0	1	0	120	60064	
3	1	1	0	180	164494	
4	0	0	1	120	86961	

5 rows × 528 columns

```
In [38]: c = df1[[ 'DAY_PART_Daytime', 'DAY_PART_Early Fringe',
    'DAY_PART_Early Morning', 'DAY_PART_Late Fringe', 'DAY_PART_Late Night',
    'Action', 'Adventure', 'Biography', 'Comedy', 'Crime', 'Documentary',
    'Drama', 'Family', 'Fantasy', 'History', 'Horror', 'Music', 'Musical',
    'Mystery', 'Romance', 'Sci-Fi', 'Short', 'Sport', 'Thriller',
    'Western']]
```

```
plt.figure(figsize=(16,6))
sns.heatmap(c.corr(),cmap='viridis')
```

Out[38]:



```
In [39]: df2=df.drop(['ASSET_ID', 'DAY_PART', 'RELEASE_YEAR', 'MPAA_RATING', 'TOMATO_IMAGE', 'Action',
    'Drama', 'Family', 'Fantasy', 'History', 'Horror', 'Music', 'Musical',
    'Mystery', 'Romance', 'Sci-Fi', 'Short', 'Sport', 'Thriller', 'War',
    'Western', 'AIRING_REVENUE'],axis=1)
```

```
In [40]: df2.info()
```

```
<class 'pandas.core.frame.DataFrame'>
Int64Index: 2517 entries, 0 to 2516
Data columns (total 21 columns):
 #   Column           Non-Null Count  Dtype  
--- 
 0   PREMIER_AIRING    2517 non-null   int64  
 1   EXHIBITION_AIRING 2517 non-null   int64  
 2   FREE_AIRING       2517 non-null   int64  
 3   SCHEDULED_RUNTIME 2517 non-null   int64  
 4   C3_RATING         2517 non-null   float64 
 5   IMDB_RATING       2517 non-null   float64 
 6   IMDB_RANKING      2517 non-null   float64 
 7   IMDB_VOTES        2517 non-null   int64  
 8   Oscar-Nomination  2517 non-null   int64  
 9   Oscar-Wins        2517 non-null   int64  
 10  Other - Nominations 2517 non-null   int64  
 11  Other - Wins     2517 non-null   int64  
 12  TOMATO_METER      2517 non-null   float64 
 13  TOMATO_RATING     2517 non-null   float64 
 14  TOMATO_REVIEWS    2517 non-null   float64 
 15  TOMATO_FRESH      2517 non-null   float64 
 16  TOMATO_ROTTEN     2517 non-null   float64 
 17  TOMATO_USER_METER 2517 non-null   float64 
 18  TOMATO_USER_RATINGS 2517 non-null   float64 
 19  TOMATO_USER_REVIEWS 2517 non-null   float64 
 20  BOX_OFFICE_EARNINGS 2517 non-null   float64 
dtypes: float64(12), int64(9)
memory usage: 432.6 KB
```

## Removing Multicollinearity

```
In [41]: import statsmodels.formula.api as smf
from statsmodels.stats.outliers_influence import variance_inflation_factor
vif_inf = pd.DataFrame()
vif_inf['VIF'] = [variance_inflation_factor(df2.values,i) for i in range(df2.shape[1])]
vif_inf['Column'] = df2.columns
vif_inf.sort_values('VIF', ascending=False)
```

Out[41]:

	VIF	Column
1	180.327272	EXHIBITION_AIRING
14	108.700317	TOMATO_REVIEWS
2	98.917356	FREE_AIRING
15	66.197853	TOMATO_FRESH
16	37.547772	TOMATO_ROTEN
13	22.981304	TOMATO_RATING
12	22.736397	TOMATO_METER
17	9.739604	TOMATO_USER_METER
5	7.817860	IMDB_RATING
11	6.818442	Other - Wins
10	5.726717	Other - Nominations
18	5.382749	TOMATO_USER_RATINGS
9	4.774760	Oscar-Wins
7	4.108281	IMDB_VOTES
8	3.793369	Oscar-Nomination
6	3.506185	IMDB_RANKING
3	1.891200	SCHEDULED_RUNTIME
19	1.782687	TOMATO_USER_REVIEWS
20	1.609190	BOX_OFFICE_EARNINGS
4	1.163283	C3_RATING
0	1.054707	PREMIER_AIRING

In [42]:

```
vif_inf = vif_inf[vif_inf['VIF']<=5].Column
v = list(vif_inf)
u = list(['AIRING_REVENUE', 'ASSET_ID', 'DAY_PART', 'RELEASE_YEAR', 'MPAA_RATING', 'TOMATO_Drama',
         'TOMATO_Family', 'TOMATO_Fantasy', 'TOMATO_History', 'TOMATO_Horror', 'TOMATO_Music',
         'TOMATO_Musical', 'TOMATO_Mystery', 'TOMATO_Romance', 'TOMATO_Sci-Fi', 'TOMATO_Shorts',
         'TOMATO_Sport', 'TOMATO_Thriller', 'TOMATO_War', 'TOMATO_Western', 'AIRING_REVENUE'])
v = v + u
v
```

```
Out[42]: ['PREMIER_AIRING',
 'SCHEDULED_RUNTIME',
 'C3_RATING',
 'IMDB_RANKING',
 'IMDB_VOTES',
 'Oscar-Nomination',
 'Oscar-Wins',
 'TOMATO_USER_REVIEWS',
 'BOX_OFFICE_EARNINGS',
 'AIRING_REVENUE',
 'ASSET_ID',
 'DAY_PART',
 'RELEASE_YEAR',
 'MPAA_RATING',
 'TOMATO_IMAGE',
 'Action',
 'Adventure',
 'Biography',
 'Comedy',
 'Crime',
 'Documentary',
 'Drama',
 'Family',
 'Fantasy',
 'History',
 'Horror',
 'Music',
 'Musical',
 'Mystery',
 'Romance',
 'Sci-Fi',
 'Short',
 'Sport',
 'Thriller',
 'War',
 'Western',
 'AIRING_REVENUE']
```

```
In [43]: df3 = df[df.columns.intersection(v)]
```

```
In [44]: cat_cols = ["ASSET_ID", "DAY_PART", "RELEASE_YEAR", "MPAA_RATING", "TOMATO_IMAGE"]
df3 = pd.get_dummies(df3, columns=cat_cols, drop_first=True)
```

## Model Creation

```
In [45]: x1 = df3.drop("AIRING_REVENUE", axis=1)
y1 = df3["AIRING_REVENUE"]
```

```
In [46]: from sklearn.model_selection import train_test_split
x1_train, x1_test, y1_train, y1_test = train_test_split(x1, y1, test_size=0.2, random_state=42)
```

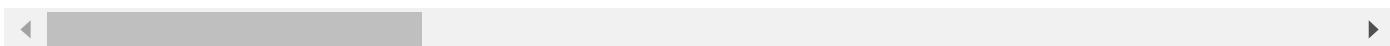
```
In [47]: from sklearn.preprocessing import StandardScaler
sc = StandardScaler()
```

```
In [48]: x1_train
```

Out[48]:

	PREMIER_AIRING	SCHEDULED_RUNTIME	C3_RATING	IMDB_RANKING	IMDB_VOTES	Osc_Nominati
<b>322</b>	0	120	1051490.0	57.262887	4891	
<b>924</b>	0	120	259632.0	57.262887	33398	
<b>715</b>	0	180	928930.0	57.262887	87410	
<b>264</b>	0	135	264340.0	63.000000	53047	
<b>1614</b>	1	150	387210.0	52.000000	97225	
...	...	...	...	...	...	...
<b>1033</b>	0	120	251901.0	57.262887	87456	
<b>1731</b>	0	120	202965.0	82.000000	59811	
<b>763</b>	0	150	170815.0	37.000000	37967	
<b>835</b>	0	180	632918.0	79.000000	363529	
<b>1653</b>	0	119	297863.0	35.000000	126166	

2013 rows × 515 columns



## Feature Scaling

```
In [49]: x1_train.iloc[:,1:9]=sc.fit_transform(x1_train.iloc[:,1:9])
x1_test.iloc[:,1:9]=sc.fit_transform(x1_test.iloc[:,1:9])
```

```
In [50]: x1_train_sm = sm.add_constant(x1_train)
```

```
In [51]: lr1 = sm.OLS(y1_train,x1_train_sm).fit()
print(lr1.summary())
```

## OLS Regression Results

Dep. Variable:	AIRING_REVENUE	R-squared:	0.810			
Model:	OLS	Adj. R-squared:	0.763			
Method:	Least Squares	F-statistic:	17.12			
Date:	Wed, 12 Oct 2022	Prob (F-statistic):	0.00			
Time:	16:41:18	Log-Likelihood:	-23812.			
No. Observations:	2013	AIC:	4.843e+04			
Df Residuals:	1611	BIC:	5.068e+04			
Df Model:	401					
Covariance Type:	nonrobust					
025	0.975]					
		coef	std err			
		t	P> t			
		[0.				
const		6.007e+04	7789.394	7.712	0.000	4.48e
+04	7.54e+04					
PREMIER_AIRING		-4207.8274	4996.798	-0.842	0.400	-1.4e
+04	5593.081					
SCHEDULED_RUNTIME		9049.9075	1.9e+04	0.477	0.633	-2.82e
+04	4.63e+04					
C3_RATING		2.098e+04	1447.688	14.494	0.000	1.81e
+04	2.38e+04					
IMDB_RANKING		-550.8693	2521.993	-0.218	0.827	-5497.
601	4395.863					
IMDB_VOTES		1.137e+04	6885.858	1.651	0.099	-2140.
978	2.49e+04					
Oscar-Nomination		2643.6645	3813.596	0.693	0.488	-4836.
466	1.01e+04					
Oscar-Wins		4312.6790	4553.641	0.947	0.344	-4619.
003	1.32e+04					
TOMATO_USER_REVIEWS		-360.5508	1524.918	-0.236	0.813	-3351.
583	2630.481					
BOX_OFFICE_EARNINGS		2709.1282	1543.917	1.755	0.079	-319.
168	5737.424					
Action		6233.3150	3771.084	1.653	0.099	-1163.
432	1.36e+04					
Adventure		2775.1339	6171.418	0.450	0.653	-9329.
718	1.49e+04					
Biography		9825.1106	7133.689	1.377	0.169	-4167.
176	2.38e+04					
Comedy		-6915.0941	5756.670	-1.201	0.230	-1.82e
+04	4376.254					
Crime		-1987.1016	5258.910	-0.378	0.706	-1.23e
+04	8327.923					
Documentary		4510.1784	1.16e+04	0.389	0.697	-1.82e
+04	2.72e+04					
Drama		-729.3476	5236.287	-0.139	0.889	-1.1e
+04	9541.302					
Family		4386.5089	6849.828	0.640	0.522	-9049.
002	1.78e+04					
Fantasy		1.244e+04	5041.579	2.468	0.014	2555.
258	2.23e+04					
History		7618.6024	1.19e+04	0.642	0.521	-1.57e
+04	3.09e+04					
Horror		5962.0867	5793.437	1.029	0.304	-5401.
378	1.73e+04					
Music		-6033.7602	9126.372	-0.661	0.509	-2.39e

			reg_f			
+04	1.19e+04					
Musical		-4343.2809	8006.786	-0.542	0.588	-2e
+04	1.14e+04					
Mystery		6732.7920	6469.021	1.041	0.298	-5955.
789	1.94e+04					
Romance		2893.5312	5847.562	0.495	0.621	-8576.
096	1.44e+04					
Sci-Fi		-2591.6689	4248.020	-0.610	0.542	-1.09e
+04	5740.558					
Short		-8599.9075	1.25e+04	-0.687	0.492	-3.32e
+04	1.6e+04					
Sport		9599.7065	8415.662	1.141	0.254	-6907.
089	2.61e+04					
Thriller		-2373.6790	3782.776	-0.627	0.530	-9793.
359	5046.001					
War		525.0894	8564.543	0.061	0.951	-1.63e
+04	1.73e+04					
Western		-1444.1461	9187.552	-0.157	0.875	-1.95e
+04	1.66e+04					
ASSET_ID_171652		-1.674e+04	2.26e+04	-0.742	0.458	-6.1e
+04	2.75e+04					
ASSET_ID_171685		-1.2e+04	2.17e+04	-0.553	0.580	-5.46e
+04	3.06e+04					
ASSET_ID_171709		-1.913e+04	2.89e+04	-0.663	0.508	-7.57e
+04	3.75e+04					
ASSET_ID_171731		-8.665e-11	5.1e-11	-1.698	0.090	-1.87e
-10	1.35e-11					
ASSET_ID_171790		-2.023e+04	1.75e+04	-1.155	0.248	-5.46e
+04	1.41e+04					
ASSET_ID_171794		3.515e+04	1.37e+04	2.573	0.010	8352.
922	6.2e+04					
ASSET_ID_171859		-1.914e+04	2.92e+04	-0.656	0.512	-7.63e
+04	3.81e+04					
ASSET_ID_171962		6289.3640	1.43e+04	0.439	0.661	-2.18e
+04	3.44e+04					
ASSET_ID_171966		-2.178e+04	1.81e+04	-1.201	0.230	-5.74e
+04	1.38e+04					
ASSET_ID_171969		-5.332e+04	1.68e+04	-3.178	0.002	-8.62e
+04	-2.04e+04					
ASSET_ID_171974		-2.218e+04	2.69e+04	-0.824	0.410	-7.5e
+04	3.06e+04					
ASSET_ID_171976		-1.385e+04	1.79e+04	-0.774	0.439	-4.89e
+04	2.12e+04					
ASSET_ID_171978		5756.0617	1.89e+04	0.305	0.760	-3.12e
+04	4.27e+04					
ASSET_ID_171982		-3.459e-11	5.09e-11	-0.680	0.497	-1.34e
-10	6.52e-11					
ASSET_ID_171983		-4724.7965	1.31e+04	-0.361	0.718	-3.04e
+04	2.09e+04					
ASSET_ID_171986		1.294e+04	1.18e+04	1.098	0.272	-1.02e
+04	3.61e+04					
ASSET_ID_171988		2.731e+04	1.31e+04	2.089	0.037	1669.
950	5.29e+04					
ASSET_ID_171991		-1.002e+04	1.93e+04	-0.520	0.603	-4.78e
+04	2.78e+04					
ASSET_ID_171996		5.735e+04	3.02e+04	1.898	0.058	-1923.
221	1.17e+05					
ASSET_ID_172003		-297.8354	1.62e+04	-0.018	0.985	-3.22e
+04	3.16e+04					
ASSET_ID_172005		5706.7923	2.33e+04	0.245	0.806	-3.99e

		reg_f				
+04	5.13e+04					
ASSET_ID_172006		-5835.9658	2.72e+04	-0.215	0.830	-5.91e
+04	4.74e+04					
ASSET_ID_172007		1.283e+04	2.44e+04	0.526	0.599	-3.5e
+04	6.07e+04					
ASSET_ID_172009		-1.767e+04	1.73e+04	-1.023	0.306	-5.16e
+04	1.62e+04					
ASSET_ID_172015		1.755e+04	1.33e+04	1.320	0.187	-8525.
945	4.36e+04					
ASSET_ID_172026		-2.786e+04	1.39e+04	-2.008	0.045	-5.51e
+04	-645.210					
ASSET_ID_172027		5655.4223	2.13e+04	0.266	0.791	-3.61e
+04	4.74e+04					
ASSET_ID_172036		-1.887e+04	2.24e+04	-0.844	0.399	-6.28e
+04	2.5e+04					
ASSET_ID_172044		-3086.4788	2.59e+04	-0.119	0.905	-5.38e
+04	4.77e+04					
ASSET_ID_172048		1.464e+04	1.37e+04	1.067	0.286	-1.23e
+04	4.16e+04					
ASSET_ID_172055		-1.01e+04	3.13e+04	-0.323	0.747	-7.15e
+04	5.13e+04					
ASSET_ID_172070		-1.092e+04	3.53e+04	-0.309	0.757	-8.02e
+04	5.83e+04					
ASSET_ID_172074		443.3033	3.17e+04	0.014	0.989	-6.17e
+04	6.26e+04					
ASSET_ID_172077		3.646e+04	2.71e+04	1.345	0.179	-1.67e
+04	8.96e+04					
ASSET_ID_172142		908.9953	2.1e+04	0.043	0.965	-4.02e
+04	4.2e+04					
ASSET_ID_172197		5209.7811	3.4e+04	0.153	0.878	-6.15e
+04	7.19e+04					
ASSET_ID_172232		-1.708e+04	3.44e+04	-0.497	0.619	-8.45e
+04	5.03e+04					
ASSET_ID_172263		4862.5092	3.36e+04	0.145	0.885	-6.1e
+04	7.07e+04					
ASSET_ID_172294		-2.222e+04	1.81e+04	-1.231	0.218	-5.76e
+04	1.32e+04					
ASSET_ID_172299		-1835.2810	1.78e+04	-0.103	0.918	-3.68e
+04	3.31e+04					
ASSET_ID_172300		-9537.0760	2.12e+04	-0.450	0.653	-5.11e
+04	3.21e+04					
ASSET_ID_172319		-4641.7216	3.04e+04	-0.153	0.879	-6.42e
+04	5.5e+04					
ASSET_ID_172320		-5.922e-11	7.44e-11	-0.796	0.426	-2.05e
-10	8.67e-11					
ASSET_ID_172378		-1.432e+04	2.52e+04	-0.568	0.570	-6.38e
+04	3.52e+04					
ASSET_ID_172380		7419.5385	2.98e+04	0.249	0.803	-5.1e
+04	6.58e+04					
ASSET_ID_172381		-3.018e-11	5.95e-11	-0.507	0.612	-1.47e
-10	8.65e-11					
ASSET_ID_172389		5803.6611	3.3e+04	0.176	0.860	-5.89e
+04	7.05e+04					
ASSET_ID_172392		-2520.9089	1.07e+04	-0.236	0.813	-2.35e
+04	1.84e+04					
ASSET_ID_172393		-2.002e+04	2.46e+04	-0.812	0.417	-6.84e
+04	2.83e+04					
ASSET_ID_172398		2.317e+04	3.02e+04	0.768	0.443	-3.6e
+04	8.24e+04					
ASSET_ID_172406		-2.923e+04	1.71e+04	-1.709	0.088	-6.28e

			reg_f			
+04	4319.646					
ASSET_ID_172410		5296.1887	3.27e+04	0.162	0.871	-5.88e
+04	6.94e+04					
ASSET_ID_172416		864.4221	2.21e+04	0.039	0.969	-4.24e
+04	4.41e+04					
ASSET_ID_172419		-2.659e+04	3.09e+04	-0.860	0.390	-8.73e
+04	3.41e+04					
ASSET_ID_172423		4.027e-11	3.94e-11	1.023	0.307	-3.7e
-11	1.18e-10					
ASSET_ID_172429		-528.2907	2e+04	-0.026	0.979	-3.98e
+04	3.88e+04					
ASSET_ID_172439		1.358e+04	3.72e+04	0.365	0.715	-5.94e
+04	8.65e+04					
ASSET_ID_172441		-2.477e+04	2.67e+04	-0.929	0.353	-7.71e
+04	2.75e+04					
ASSET_ID_172450		-4530.6337	1.46e+04	-0.310	0.757	-3.32e
+04	2.42e+04					
ASSET_ID_172460		-1.862e+04	2.17e+04	-0.856	0.392	-6.13e
+04	2.4e+04					
ASSET_ID_172472		3850.6528	1.75e+04	0.220	0.826	-3.04e
+04	3.81e+04					
ASSET_ID_172481		6.316e+04	2.36e+04	2.677	0.008	1.69e
+04	1.09e+05					
ASSET_ID_172507		-1046.0937	1.25e+04	-0.084	0.933	-2.56e
+04	2.35e+04					
ASSET_ID_172510		-5.04e+04	3.47e+04	-1.451	0.147	-1.19e
+05	1.77e+04					
ASSET_ID_172521		-2.096e+04	3.28e+04	-0.638	0.523	-8.54e
+04	4.35e+04					
ASSET_ID_172597		1932.9534	2.9e+04	0.067	0.947	-5.49e
+04	5.88e+04					
ASSET_ID_172695		-5855.9561	1.57e+04	-0.373	0.709	-3.67e
+04	2.5e+04					
ASSET_ID_172707		-1.808e+04	4.75e+04	-0.381	0.703	-1.11e
+05	7.5e+04					
ASSET_ID_172741		-7923.3822	1.47e+04	-0.537	0.591	-3.68e
+04	2.1e+04					
ASSET_ID_172790		-9305.7044	2.19e+04	-0.425	0.671	-5.22e
+04	3.36e+04					
ASSET_ID_172793		-6596.4063	3.61e+04	-0.183	0.855	-7.73e
+04	6.41e+04					
ASSET_ID_172823		-1.013e+04	1.24e+04	-0.816	0.414	-3.45e
+04	1.42e+04					
ASSET_ID_172824		-2.857e+04	3.42e+04	-0.835	0.404	-9.57e
+04	3.86e+04					
ASSET_ID_172826		-7718.4156	2.43e+04	-0.318	0.751	-5.54e
+04	3.99e+04					
ASSET_ID_172830		2.251e+04	2.01e+04	1.118	0.264	-1.7e
+04	6.2e+04					
ASSET_ID_172834		-2.335e+04	3.99e+04	-0.586	0.558	-1.02e
+05	5.48e+04					
ASSET_ID_172836		1.105e+05	3.2e+04	3.451	0.001	4.77e
+04	1.73e+05					
ASSET_ID_172855		3.325e-11	4.4e-11	0.756	0.450	-5.31e
-11	1.2e-10					
ASSET_ID_172856		7021.5657	3.56e+04	0.197	0.844	-6.28e
+04	7.69e+04					
ASSET_ID_172872		-2.566e+04	1.47e+04	-1.743	0.082	-5.45e
+04	3215.895					
ASSET_ID_172873		-7531.8599	1.56e+04	-0.482	0.630	-3.82e

		reg_f				
+04	2.31e+04					
ASSET_ID_172880		3.265e+04	2.41e+04	1.355	0.176	-1.46e
+04	7.99e+04					
ASSET_ID_172893		-1.277e+04	2.09e+04	-0.611	0.541	-5.38e
+04	2.82e+04					
ASSET_ID_172895		2.297e+04	1.75e+04	1.312	0.190	-1.14e
+04	5.73e+04					
ASSET_ID_172900		-1.722e+04	2.6e+04	-0.663	0.507	-6.81e
+04	3.37e+04					
ASSET_ID_172908		2.259e+04	1.23e+04	1.839	0.066	-1508.
685	4.67e+04					
ASSET_ID_172915		9143.8656	1.76e+04	0.519	0.604	-2.54e
+04	4.37e+04					
ASSET_ID_172918		-1.991e+04	1.86e+04	-1.071	0.284	-5.64e
+04	1.66e+04					
ASSET_ID_172919		-9678.4850	2.03e+04	-0.477	0.634	-4.95e
+04	3.02e+04					
ASSET_ID_172920		3.185e+04	3.11e+04	1.025	0.306	-2.91e
+04	9.28e+04					
ASSET_ID_172951		-1.615e+04	2.04e+04	-0.792	0.428	-5.61e
+04	2.38e+04					
ASSET_ID_172952		-2.624e+04	2.48e+04	-1.057	0.290	-7.49e
+04	2.24e+04					
ASSET_ID_173007		-2.671e+04	3.05e+04	-0.876	0.381	-8.65e
+04	3.31e+04					
ASSET_ID_173041		-2.205e+04	3.37e+04	-0.655	0.513	-8.81e
+04	4.4e+04					
ASSET_ID_173046		9342.3620	1.74e+04	0.537	0.591	-2.48e
+04	4.35e+04					
ASSET_ID_173047		-1.791e-13	3.92e-11	-0.005	0.996	-7.71e
-11	7.67e-11					
ASSET_ID_173071		2392.1842	2.85e+04	0.084	0.933	-5.34e
+04	5.82e+04					
ASSET_ID_173077		1.325e+04	1.36e+04	0.978	0.328	-1.33e
+04	3.98e+04					
ASSET_ID_173084		-1.736e+04	1.08e+04	-1.606	0.108	-3.86e
+04	3843.779					
ASSET_ID_173259		4.087e+04	3.35e+04	1.221	0.222	-2.48e
+04	1.07e+05					
ASSET_ID_173264		-1605.4200	1.59e+04	-0.101	0.920	-3.28e
+04	2.96e+04					
ASSET_ID_173267		-7255.9769	3.38e+04	-0.215	0.830	-7.36e
+04	5.9e+04					
ASSET_ID_173275		4.373e+04	2.42e+04	1.807	0.071	-3745.
991	9.12e+04					
ASSET_ID_173288		-2.012e+04	2.42e+04	-0.830	0.406	-6.76e
+04	2.74e+04					
ASSET_ID_173293		-2.417e+04	3.37e+04	-0.718	0.473	-9.02e
+04	4.18e+04					
ASSET_ID_173295		-8500.5671	1.77e+04	-0.479	0.632	-4.33e
+04	2.63e+04					
ASSET_ID_173298		8.659e+04	4.25e+04	2.037	0.042	3213.
881	1.7e+05					
ASSET_ID_173300		-1.607e+04	1.6e+04	-1.004	0.316	-4.75e
+04	1.53e+04					
ASSET_ID_173325		-8042.1457	1.39e+04	-0.578	0.563	-3.53e
+04	1.92e+04					
ASSET_ID_173328		3.587e+04	3.43e+04	1.047	0.295	-3.14e
+04	1.03e+05					
ASSET_ID_173329		4281.8736	1.75e+04	0.244	0.807	-3.01e

+04	3.87e+04					
ASSET_ID_173337		5176.4782	1.39e+04	0.372	0.710	-2.21e
+04	3.25e+04					
ASSET_ID_173350		2.351e+04	1.1e+04	2.147	0.032	2028.
256	4.5e+04					
ASSET_ID_173353		-3536.4475	3.63e+04	-0.098	0.922	-7.47e
+04	6.76e+04					
ASSET_ID_173388		1.348e+04	2.34e+04	0.575	0.565	-3.25e
+04	5.94e+04					
ASSET_ID_173393		4.215e+04	1.44e+04	2.931	0.003	1.39e
+04	7.04e+04					
ASSET_ID_173395		2458.7773	1.18e+04	0.208	0.836	-2.08e
+04	2.57e+04					
ASSET_ID_173399		-5551.5481	2.62e+04	-0.212	0.832	-5.69e
+04	4.58e+04					
ASSET_ID_173446		-1.439e+04	3.32e+04	-0.433	0.665	-7.96e
+04	5.08e+04					
ASSET_ID_173451		3.635e+04	1.91e+04	1.907	0.057	-1040.
532	7.37e+04					
ASSET_ID_173455		-1.598e+04	3.44e+04	-0.465	0.642	-8.34e
+04	5.14e+04					
ASSET_ID_173469		-1.811e+04	3.83e+04	-0.473	0.636	-9.32e
+04	5.7e+04					
ASSET_ID_173492		1.101e+04	2.27e+04	0.485	0.627	-3.35e
+04	5.55e+04					
ASSET_ID_173505		1.98e+04	1.15e+04	1.721	0.085	-2768.
639	4.24e+04					
ASSET_ID_173508		-4539.9353	3.61e+04	-0.126	0.900	-7.54e
+04	6.63e+04					
ASSET_ID_173600		9447.0327	1.68e+04	0.563	0.573	-2.35e
+04	4.24e+04					
ASSET_ID_173614		-1.128e+04	1.33e+04	-0.849	0.396	-3.73e
+04	1.48e+04					
ASSET_ID_173683		-4.468e+04	2.14e+04	-2.088	0.037	-8.66e
+04	-2705.359					
ASSET_ID_173684		-2.36e+04	3.53e+04	-0.668	0.504	-9.29e
+04	4.57e+04					
ASSET_ID_173687		6797.6861	3.82e+04	0.178	0.859	-6.81e
+04	8.17e+04					
ASSET_ID_173695		-4.201e+04	2.31e+04	-1.816	0.070	-8.74e
+04	3362.914					
ASSET_ID_173703		2.942e+04	1.98e+04	1.483	0.138	-9500.
424	6.83e+04					
ASSET_ID_173707		-1841.7160	1.4e+04	-0.132	0.895	-2.92e
+04	2.56e+04					
ASSET_ID_173714		-1.174e+04	1.15e+04	-1.024	0.306	-3.42e
+04	1.08e+04					
ASSET_ID_173725		7197.4079	1.58e+04	0.455	0.649	-2.38e
+04	3.82e+04					
ASSET_ID_173735		-1.643e+04	2.33e+04	-0.705	0.481	-6.22e
+04	2.93e+04					
ASSET_ID_173738		-1.044e+04	1.63e+04	-0.643	0.521	-4.23e
+04	2.14e+04					
ASSET_ID_173743		3311.4894	1.78e+04	0.186	0.853	-3.16e
+04	3.83e+04					
ASSET_ID_173763		-3694.0430	1.15e+04	-0.321	0.748	-2.63e
+04	1.89e+04					
ASSET_ID_173770		6418.0365	2.07e+04	0.310	0.757	-3.42e
+04	4.7e+04					
ASSET_ID_173771		-1.369e+04	1.48e+04	-0.923	0.356	-4.28e

+04	1.54e+04					
ASSET_ID_173804		3.089e+04	3.52e+04	0.879	0.380	-3.81e
+04	9.98e+04					
ASSET_ID_173877		2.75e-11	3.88e-11	0.710	0.478	-4.85e
-11	1.04e-10					
ASSET_ID_173919		-1767.4108	2.04e+04	-0.087	0.931	-4.18e
+04	3.83e+04					
ASSET_ID_173927		-2769.2588	3.18e+04	-0.087	0.931	-6.52e
+04	5.97e+04					
ASSET_ID_174052		-1.09e+04	2.13e+04	-0.512	0.608	-5.26e
+04	3.08e+04					
ASSET_ID_174057		6590.8000	2.48e+04	0.265	0.791	-4.21e
+04	5.53e+04					
ASSET_ID_174145		-5310.8992	1.21e+04	-0.440	0.660	-2.9e
+04	1.84e+04					
ASSET_ID_174149		-8686.4442	1.46e+04	-0.596	0.551	-3.73e
+04	1.99e+04					
ASSET_ID_174174		8669.6410	2.59e+04	0.334	0.738	-4.22e
+04	5.96e+04					
ASSET_ID_174191		-3356.7234	3.46e+04	-0.097	0.923	-7.12e
+04	6.45e+04					
ASSET_ID_174201		1.305e+04	2.54e+04	0.514	0.608	-3.68e
+04	6.29e+04					
ASSET_ID_174206		-9937.0447	2e+04	-0.496	0.620	-4.92e
+04	2.94e+04					
ASSET_ID_174210		-3.427e+04	2.12e+04	-1.618	0.106	-7.58e
+04	7262.766					
ASSET_ID_174224		-7095.6178	2.76e+04	-0.257	0.797	-6.12e
+04	4.7e+04					
ASSET_ID_174241		-1.973e+04	2.65e+04	-0.745	0.456	-7.17e
+04	3.22e+04					
ASSET_ID_174243		-7978.7578	2.48e+04	-0.321	0.748	-5.67e
+04	4.07e+04					
ASSET_ID_174264		3.313e+04	3.31e+04	1.000	0.318	-3.19e
+04	9.81e+04					
ASSET_ID_174283		1.946e+04	1.56e+04	1.248	0.212	-1.11e
+04	5e+04					
ASSET_ID_174380		2102.8709	1.79e+04	0.118	0.906	-3.29e
+04	3.71e+04					
ASSET_ID_174384		-61.3163	3.64e+04	-0.002	0.999	-7.15e
+04	7.14e+04					
ASSET_ID_174543		-6828.8108	1.29e+04	-0.530	0.596	-3.21e
+04	1.85e+04					
ASSET_ID_174569		-3996.1531	1.16e+04	-0.344	0.731	-2.68e
+04	1.88e+04					
ASSET_ID_174607		1.576e+04	2.19e+04	0.719	0.472	-2.72e
+04	5.87e+04					
ASSET_ID_174615		-4.078e+04	3.29e+04	-1.240	0.215	-1.05e
+05	2.37e+04					
ASSET_ID_174617		3.628e+04	1.93e+04	1.879	0.060	-1591.
622	7.42e+04					
ASSET_ID_174618		-1.626e+04	3.79e+04	-0.429	0.668	-9.05e
+04	5.8e+04					
ASSET_ID_174619		1.017e+04	2.36e+04	0.431	0.667	-3.61e
+04	5.65e+04					
ASSET_ID_174620		5.687e-12	3.55e-11	0.160	0.873	-6.39e
-11	7.53e-11					
ASSET_ID_174628		-5906.5103	2.75e+04	-0.215	0.830	-5.98e
+04	4.79e+04					
ASSET_ID_174631		-3.28e+04	3.2e+04	-1.026	0.305	-9.55e

		reg_f				
+04	2.99e+04					
ASSET_ID_174637		2327.6886	2.2e+04	0.106	0.916	-4.08e
+04	4.54e+04					
ASSET_ID_174648		4.696e+04	3.29e+04	1.426	0.154	-1.76e
+04	1.12e+05					
ASSET_ID_174650		-7.918e+04	3.56e+04	-2.221	0.026	-1.49e
+05	-9265.533					
ASSET_ID_174652		1.346e+04	1.92e+04	0.700	0.484	-2.43e
+04	5.12e+04					
ASSET_ID_174657		-8358.5731	2.93e+04	-0.285	0.776	-6.59e
+04	4.92e+04					
ASSET_ID_174677		-1.026e+04	2.22e+04	-0.463	0.644	-5.37e
+04	3.32e+04					
ASSET_ID_174683		-3.79e+04	2.5e+04	-1.516	0.130	-8.7e
+04	1.11e+04					
ASSET_ID_174687		3.713e-11	3.39e-11	1.095	0.274	-2.94e
-11	1.04e-10					
ASSET_ID_174689		-1.09e+04	2.52e+04	-0.433	0.665	-6.03e
+04	3.85e+04					
ASSET_ID_174691		-3.164e+04	2.56e+04	-1.235	0.217	-8.19e
+04	1.86e+04					
ASSET_ID_174695		3.64e+04	1.59e+04	2.295	0.022	5296.
418	6.75e+04					
ASSET_ID_174721		-1.833e+04	2.31e+04	-0.792	0.428	-6.37e
+04	2.7e+04					
ASSET_ID_174726		-1.39e+04	1.42e+04	-0.980	0.327	-4.17e
+04	1.39e+04					
ASSET_ID_174748		-1.089e+04	2.36e+04	-0.461	0.645	-5.72e
+04	3.55e+04					
ASSET_ID_174762		-6501.7183	2.52e+04	-0.258	0.796	-5.59e
+04	4.29e+04					
ASSET_ID_174801		-1.02e+04	2.41e+04	-0.423	0.672	-5.75e
+04	3.71e+04					
ASSET_ID_174839		-9078.9080	2.07e+04	-0.439	0.660	-4.96e
+04	3.14e+04					
ASSET_ID_174875		3026.3485	3.21e+04	0.094	0.925	-6e
+04	6.6e+04					
ASSET_ID_174905		-6837.2044	1.55e+04	-0.442	0.658	-3.72e
+04	2.35e+04					
ASSET_ID_174909		3590.9619	1.48e+04	0.243	0.808	-2.54e
+04	3.26e+04					
ASSET_ID_174910		-1.214e+04	3.13e+04	-0.389	0.698	-7.35e
+04	4.92e+04					
ASSET_ID_174991		8585.9348	1.78e+04	0.482	0.630	-2.64e
+04	4.35e+04					
ASSET_ID_175013		-2.789e-11	3.3e-11	-0.845	0.398	-9.26e
-11	3.68e-11					
ASSET_ID_175026		-1.885e+04	2.35e+04	-0.803	0.422	-6.49e
+04	2.72e+04					
ASSET_ID_175027		-8853.1469	3.2e+04	-0.277	0.782	-7.16e
+04	5.38e+04					
ASSET_ID_175029		2.115e+04	2.01e+04	1.053	0.293	-1.83e
+04	6.06e+04					
ASSET_ID_175030		-2.498e+04	2.05e+04	-1.219	0.223	-6.51e
+04	1.52e+04					
ASSET_ID_175031		1.06e+04	2.72e+04	0.390	0.697	-4.27e
+04	6.39e+04					
ASSET_ID_175034		3.882e+04	3.67e+04	1.058	0.290	-3.32e
+04	1.11e+05					
ASSET_ID_175071		6101.8406	3.76e+04	0.162	0.871	-6.77e

		reg_f				
+04	7.99e+04					
ASSET_ID_175073		-4.825e-11	3.58e-11	-1.349	0.178	-1.18e
-10	2.19e-11					
ASSET_ID_175081		1.409e+04	1.88e+04	0.751	0.453	-2.27e
+04	5.09e+04					
ASSET_ID_181137		-202.9208	3.52e+04	-0.006	0.995	-6.92e
+04	6.88e+04					
ASSET_ID_181138		8964.9634	1.93e+04	0.464	0.643	-2.89e
+04	4.68e+04					
ASSET_ID_181141		-2.232e+04	2.76e+04	-0.808	0.419	-7.65e
+04	3.19e+04					
ASSET_ID_181142		9462.8676	2.67e+04	0.354	0.723	-4.29e
+04	6.18e+04					
ASSET_ID_181143		2.394e+04	1.51e+04	1.585	0.113	-5679.
958	5.36e+04					
ASSET_ID_181145		9693.2724	2.75e+04	0.353	0.724	-4.42e
+04	6.36e+04					
ASSET_ID_181146		-2.78e+04	2.81e+04	-0.988	0.323	-8.3e
+04	2.74e+04					
ASSET_ID_181157		-3.474e+04	2.64e+04	-1.317	0.188	-8.65e
+04	1.7e+04					
ASSET_ID_181158		-1.312e+04	2.44e+04	-0.537	0.591	-6.1e
+04	3.48e+04					
ASSET_ID_181161		-5168.1611	3.36e+04	-0.154	0.878	-7.1e
+04	6.07e+04					
ASSET_ID_181163		-16.1434	1.87e+04	-0.001	0.999	-3.67e
+04	3.67e+04					
ASSET_ID_181604		5515.8359	1.58e+04	0.349	0.727	-2.55e
+04	3.65e+04					
ASSET_ID_181751		-4048.0385	3.25e+04	-0.125	0.901	-6.78e
+04	5.97e+04					
ASSET_ID_181753		-2.11e+04	1.53e+04	-1.379	0.168	-5.11e
+04	8908.812					
ASSET_ID_181758		-8786.5755	2.21e+04	-0.397	0.692	-5.22e
+04	3.46e+04					
ASSET_ID_181759		2.484e+04	1.36e+04	1.827	0.068	-1829.
002	5.15e+04					
ASSET_ID_181760		2.992e+04	1.91e+04	1.570	0.117	-7451.
646	6.73e+04					
ASSET_ID_181762		-1.465e+04	3.03e+04	-0.483	0.629	-7.42e
+04	4.49e+04					
ASSET_ID_181763		-2.091e+04	2.55e+04	-0.820	0.412	-7.09e
+04	2.91e+04					
ASSET_ID_181766		-7498.4362	1.45e+04	-0.517	0.605	-3.59e
+04	2.09e+04					
ASSET_ID_182769		2.736e+04	1.24e+04	2.215	0.027	3128.
110	5.16e+04					
ASSET_ID_182887		7122.6422	1.96e+04	0.363	0.717	-3.13e
+04	4.56e+04					
ASSET_ID_185234		3.769e+04	1.7e+04	2.221	0.027	4400.
809	7.1e+04					
ASSET_ID_185235		1.28e+04	1.85e+04	0.690	0.490	-2.36e
+04	4.92e+04					
ASSET_ID_185242		6239.6590	1.37e+04	0.457	0.648	-2.06e
+04	3.3e+04					
ASSET_ID_185245		1.437e+04	1.88e+04	0.765	0.444	-2.25e
+04	5.12e+04					
ASSET_ID_185257		3.421e+04	1.47e+04	2.322	0.020	5310.
072	6.31e+04					
ASSET_ID_185269		-1.954e+04	3.8e+04	-0.514	0.607	-9.41e

		reg_f				
+04	5.5e+04					
ASSET_ID_185298		-3.788e+04	2.23e+04	-1.699	0.089	-8.16e
+04	5840.301					
ASSET_ID_185300		2.797e+04	3.55e+04	0.788	0.431	-4.16e
+04	9.76e+04					
ASSET_ID_185302		4.243e+04	2.32e+04	1.826	0.068	-3136.
554	8.8e+04					
ASSET_ID_185303		1.327e+04	1.18e+04	1.127	0.260	-9828.
059	3.64e+04					
ASSET_ID_185304		-6583.8777	2.25e+04	-0.292	0.770	-5.08e
+04	3.76e+04					
ASSET_ID_185309		1.18e+04	1.61e+04	0.734	0.463	-1.97e
+04	4.34e+04					
ASSET_ID_185311		-3.302e+04	2.45e+04	-1.347	0.178	-8.11e
+04	1.51e+04					
ASSET_ID_185324		6112.8433	1.45e+04	0.420	0.674	-2.24e
+04	3.46e+04					
ASSET_ID_185326		-6099.9493	2.39e+04	-0.255	0.799	-5.31e
+04	4.09e+04					
ASSET_ID_185336		-1.038e+04	1.69e+04	-0.615	0.539	-4.35e
+04	2.27e+04					
ASSET_ID_185337		3894.7209	2.55e+04	0.153	0.878	-4.6e
+04	5.38e+04					
ASSET_ID_185344		-2.121e+04	2.15e+04	-0.986	0.325	-6.34e
+04	2.1e+04					
ASSET_ID_185349		-2092.0719	2.02e+04	-0.103	0.918	-4.18e
+04	3.76e+04					
ASSET_ID_185351		-2.812e+04	1.2e+04	-2.342	0.019	-5.17e
+04	-4571.359					
ASSET_ID_185352		2.234e+04	1.34e+04	1.664	0.096	-4000.
691	4.87e+04					
ASSET_ID_185353		2273.5595	1.08e+04	0.211	0.833	-1.88e
+04	2.34e+04					
ASSET_ID_185354		2.011e+04	2.34e+04	0.858	0.391	-2.59e
+04	6.61e+04					
ASSET_ID_185356		3.351e+04	1.47e+04	2.282	0.023	4710.
016	6.23e+04					
ASSET_ID_185358		-2.507e+04	2.21e+04	-1.132	0.258	-6.85e
+04	1.84e+04					
ASSET_ID_185359		-3.956e+04	3.18e+04	-1.243	0.214	-1.02e
+05	2.29e+04					
ASSET_ID_185361		-3153.8229	1.95e+04	-0.162	0.871	-4.14e
+04	3.5e+04					
ASSET_ID_185364		4654.4732	1.43e+04	0.325	0.745	-2.34e
+04	3.27e+04					
ASSET_ID_185366		-3.017e+04	2.34e+04	-1.287	0.198	-7.61e
+04	1.58e+04					
ASSET_ID_185367		8954.2667	3.26e+04	0.275	0.784	-5.5e
+04	7.29e+04					
ASSET_ID_185368		-1269.4997	2e+04	-0.064	0.949	-4.04e
+04	3.79e+04					
ASSET_ID_185372		-1.459e+04	2.91e+04	-0.502	0.616	-7.16e
+04	4.24e+04					
ASSET_ID_185376		1.605e+04	1.77e+04	0.908	0.364	-1.86e
+04	5.07e+04					
ASSET_ID_185396		-6385.6190	3.2e+04	-0.199	0.842	-6.92e
+04	5.64e+04					
ASSET_ID_185400		1.685e+04	4e+04	0.422	0.673	-6.15e
+04	9.52e+04					
ASSET_ID_185401		-6547.5048	1.76e+04	-0.372	0.710	-4.11e

		reg_f				
+04	2.8e+04					
ASSET_ID_185405		-1933.4268	3.56e+04	-0.054	0.957	-7.18e
+04	6.79e+04					
ASSET_ID_185439		-6.221e+04	3.11e+04	-1.998	0.046	-1.23e
+05	-1148.695					
ASSET_ID_185440		-7622.9871	1.66e+04	-0.458	0.647	-4.02e
+04	2.5e+04					
ASSET_ID_185444		-6643.3339	2.16e+04	-0.307	0.759	-4.9e
+04	3.57e+04					
ASSET_ID_185446		3.551e+04	2.24e+04	1.583	0.114	-8482.
953	7.95e+04					
ASSET_ID_185449		3.555e+04	3.23e+04	1.100	0.271	-2.78e
+04	9.89e+04					
ASSET_ID_185452		2.144e+04	2.94e+04	0.728	0.467	-3.63e
+04	7.92e+04					
ASSET_ID_185458		-3.158e+04	2.11e+04	-1.497	0.135	-7.29e
+04	9787.771					
ASSET_ID_185459		1.481e+04	1.31e+04	1.131	0.258	-1.09e
+04	4.05e+04					
ASSET_ID_185461		8018.9021	1.79e+04	0.448	0.654	-2.71e
+04	4.31e+04					
ASSET_ID_185462		2636.8111	1.43e+04	0.185	0.853	-2.53e
+04	3.06e+04					
ASSET_ID_185463		-2.473e+04	2.45e+04	-1.010	0.313	-7.28e
+04	2.33e+04					
ASSET_ID_185467		2.729e+04	1.83e+04	1.488	0.137	-8692.
226	6.33e+04					
ASSET_ID_185473		1.306e+04	2.38e+04	0.549	0.583	-3.36e
+04	5.97e+04					
ASSET_ID_185478		4.8e+04	2.24e+04	2.140	0.033	4004.
427	9.2e+04					
ASSET_ID_185482		-1004.9322	1.42e+04	-0.071	0.944	-2.89e
+04	2.69e+04					
ASSET_ID_185484		2.608e+04	2.54e+04	1.027	0.304	-2.37e
+04	7.59e+04					
ASSET_ID_185496		1.395e+04	1.99e+04	0.701	0.483	-2.51e
+04	5.3e+04					
ASSET_ID_185497		1.527e+04	2.08e+04	0.735	0.462	-2.55e
+04	5.6e+04					
ASSET_ID_185498		5.872e+04	3.16e+04	1.856	0.064	-3328.
550	1.21e+05					
ASSET_ID_185501		-2.192e+04	2.1e+04	-1.044	0.297	-6.31e
+04	1.93e+04					
ASSET_ID_185502		1.052e+04	2.01e+04	0.524	0.600	-2.89e
+04	4.99e+04					
ASSET_ID_185503		-2226.2375	1.88e+04	-0.119	0.906	-3.9e
+04	3.46e+04					
ASSET_ID_185504		-2.628e+04	2.68e+04	-0.981	0.327	-7.88e
+04	2.63e+04					
ASSET_ID_185508		-2.932e+04	2.02e+04	-1.452	0.147	-6.89e
+04	1.03e+04					
ASSET_ID_185514		3.953e+04	1.84e+04	2.153	0.031	3515.
307	7.55e+04					
ASSET_ID_185515		4723.7458	1.54e+04	0.307	0.759	-2.54e
+04	3.49e+04					
ASSET_ID_185518		2.328e+04	1.56e+04	1.493	0.136	-7312.
734	5.39e+04					
ASSET_ID_185520		-5197.0053	1.38e+04	-0.377	0.706	-3.22e
+04	2.18e+04					
ASSET_ID_185523		-7140.5967	1.95e+04	-0.367	0.714	-4.54e

		reg_f				
+04	3.11e+04					
ASSET_ID_185529		1.993e+04	1.4e+04	1.427	0.154	-7463.
861	4.73e+04					
ASSET_ID_185530		3.436e+04	1.65e+04	2.087	0.037	2061.
380	6.67e+04					
ASSET_ID_185531		-1.88e+04	1.16e+04	-1.614	0.107	-4.17e
+04	4043.209					
ASSET_ID_185532		-9205.2797	1.48e+04	-0.622	0.534	-3.82e
+04	1.98e+04					
ASSET_ID_185533		-1.652e+04	1.31e+04	-1.259	0.208	-4.23e
+04	9228.478					
ASSET_ID_185534		-4.205e+04	2.59e+04	-1.626	0.104	-9.28e
+04	8671.180					
ASSET_ID_185540		8450.6265	3.5e+04	0.241	0.809	-6.03e
+04	7.72e+04					
ASSET_ID_185541		105.0003	2.12e+04	0.005	0.996	-4.16e
+04	4.18e+04					
ASSET_ID_185542		2.517e+04	3.84e+04	0.655	0.513	-5.02e
+04	1.01e+05					
ASSET_ID_185543		-1675.4674	2.49e+04	-0.067	0.946	-5.05e
+04	4.72e+04					
ASSET_ID_185545		2617.5378	3.38e+04	0.077	0.938	-6.37e
+04	6.89e+04					
ASSET_ID_185546		-1.191e+04	1.56e+04	-0.765	0.444	-4.24e
+04	1.86e+04					
ASSET_ID_185551		2.41e+04	4.12e+04	0.585	0.558	-5.67e
+04	1.05e+05					
ASSET_ID_185553		3404.3427	1.36e+04	0.251	0.802	-2.32e
+04	3e+04					
ASSET_ID_185554		4.668e+04	2.54e+04	1.836	0.067	-3197.
773	9.66e+04					
ASSET_ID_185557		-4262.8227	1.46e+04	-0.292	0.770	-3.29e
+04	2.43e+04					
ASSET_ID_185558		1.669e+04	1.97e+04	0.845	0.398	-2.2e
+04	5.54e+04					
ASSET_ID_185561		2755.4317	1.49e+04	0.185	0.853	-2.64e
+04	3.19e+04					
ASSET_ID_185563		1.142e+04	2.11e+04	0.542	0.588	-2.99e
+04	5.27e+04					
ASSET_ID_185564		-2820.4309	3.22e+04	-0.088	0.930	-6.6e
+04	6.04e+04					
ASSET_ID_185566		-1466.7876	1.68e+04	-0.088	0.930	-3.43e
+04	3.14e+04					
ASSET_ID_185567		-1523.9926	1.88e+04	-0.081	0.935	-3.83e
+04	3.53e+04					
ASSET_ID_185569		-2.059e+04	1.67e+04	-1.235	0.217	-5.33e
+04	1.21e+04					
ASSET_ID_186982		1.467e+04	3.24e+04	0.453	0.651	-4.89e
+04	7.82e+04					
ASSET_ID_186984		-3800.2916	2.64e+04	-0.144	0.885	-5.55e
+04	4.79e+04					
ASSET_ID_186987		3528.1383	1.5e+04	0.235	0.814	-2.59e
+04	3.3e+04					
ASSET_ID_187261		-2.095e-11	2.1e-11	-0.999	0.318	-6.21e
-11	2.02e-11					
ASSET_ID_187610		-1.41e+04	2.58e+04	-0.547	0.584	-6.47e
+04	3.65e+04					
ASSET_ID_187617		6.88e-11	2.52e-11	2.728	0.006	1.93e
-11	1.18e-10					
ASSET_ID_187742		-3871.1907	1.44e+04	-0.269	0.788	-3.21e

		reg_f				
+04	2.44e+04					
ASSET_ID_187743		2171.0194	1.72e+04	0.126	0.900	-3.16e
+04	3.6e+04					
ASSET_ID_187745		-1.453e+04	1.48e+04	-0.982	0.326	-4.36e
+04	1.45e+04					
ASSET_ID_187753		-4087.7732	2.06e+04	-0.198	0.843	-4.45e
+04	3.64e+04					
ASSET_ID_187754		-6461.2176	1.97e+04	-0.328	0.743	-4.51e
+04	3.21e+04					
ASSET_ID_187756		2.126e+04	2.12e+04	1.003	0.316	-2.03e
+04	6.28e+04					
ASSET_ID_187758		2.143e+04	1.83e+04	1.170	0.242	-1.45e
+04	5.74e+04					
ASSET_ID_188319		-1.077e+04	2.36e+04	-0.457	0.648	-5.7e
+04	3.55e+04					
ASSET_ID_188364		1.652e+04	2.39e+04	0.691	0.490	-3.04e
+04	6.34e+04					
ASSET_ID_188365		-2.738e+04	1.97e+04	-1.392	0.164	-6.6e
+04	1.12e+04					
ASSET_ID_188621		-3.437e+04	2.73e+04	-1.261	0.207	-8.78e
+04	1.91e+04					
ASSET_ID_190261		8001.7558	2.16e+04	0.371	0.711	-3.43e
+04	5.03e+04					
ASSET_ID_190538		-1.347e+04	3.17e+04	-0.424	0.671	-7.57e
+04	4.88e+04					
ASSET_ID_190543		-8971.1632	2.16e+04	-0.414	0.679	-5.14e
+04	3.35e+04					
ASSET_ID_190544		6.213e+04	4.08e+04	1.521	0.128	-1.8e
+04	1.42e+05					
ASSET_ID_190552		2.423e+04	1.89e+04	1.283	0.200	-1.28e
+04	6.13e+04					
ASSET_ID_190556		-2.372e+04	3.16e+04	-0.751	0.453	-8.57e
+04	3.82e+04					
ASSET_ID_190717		-1.359e+04	3.27e+04	-0.415	0.678	-7.78e
+04	5.06e+04					
ASSET_ID_190778		-3109.8257	1.96e+04	-0.158	0.874	-4.16e
+04	3.54e+04					
ASSET_ID_191035		4.243e+04	1.65e+04	2.570	0.010	1e
+04	7.48e+04					
ASSET_ID_191051		-1.388e+04	2.16e+04	-0.643	0.520	-5.62e
+04	2.85e+04					
ASSET_ID_191055		4028.1246	1.93e+04	0.209	0.834	-3.38e
+04	4.18e+04					
ASSET_ID_191058		4.556e+04	1.06e+04	4.315	0.000	2.48e
+04	6.63e+04					
ASSET_ID_191069		1.566e+04	1.45e+04	1.080	0.280	-1.28e
+04	4.41e+04					
ASSET_ID_191071		4.82e+04	1.77e+04	2.717	0.007	1.34e
+04	8.3e+04					
ASSET_ID_191074		-3.107e+04	2.58e+04	-1.207	0.228	-8.16e
+04	1.94e+04					
ASSET_ID_191075		-6.562e+04	3.73e+04	-1.757	0.079	-1.39e
+05	7618.493					
ASSET_ID_191078		3.773e+04	2.02e+04	1.869	0.062	-1872.
741	7.73e+04					
ASSET_ID_191081		-1.76e+04	3.69e+04	-0.477	0.633	-8.99e
+04	5.47e+04					
ASSET_ID_191087		854.1539	1.78e+04	0.048	0.962	-3.4e
+04	3.57e+04					
ASSET_ID_191088		-2.043e+04	2.16e+04	-0.946	0.344	-6.28e

		reg_f				
+04	2.2e+04					
ASSET_ID_191093		-4.286e+04	8.25e+04	-0.520	0.603	-2.05e
+05	1.19e+05					
ASSET_ID_191105		3.068e+04	3.3e+04	0.930	0.353	-3.41e
+04	9.54e+04					
ASSET_ID_191566		-6.888e+04	2.76e+04	-2.499	0.013	-1.23e
+05	-1.48e+04					
ASSET_ID_191745		-1.913e+04	3.09e+04	-0.619	0.536	-7.97e
+04	4.14e+04					
ASSET_ID_191784		6820.1666	2.37e+04	0.288	0.773	-3.96e
+04	5.33e+04					
ASSET_ID_191786		1454.1062	2.13e+04	0.068	0.946	-4.03e
+04	4.32e+04					
ASSET_ID_191828		-1.592e-11	1.69e-11	-0.944	0.345	-4.9e
-11	1.72e-11					
ASSET_ID_191897		6295.7388	3.72e+04	0.169	0.866	-6.67e
+04	7.93e+04					
ASSET_ID_191898		1.562e+04	2.8e+04	0.558	0.577	-3.93e
+04	7.05e+04					
ASSET_ID_191902		-3.409e+04	1.94e+04	-1.759	0.079	-7.21e
+04	3928.446					
ASSET_ID_192207		7227.5682	1.97e+04	0.368	0.713	-3.13e
+04	4.58e+04					
ASSET_ID_192657		-1.042e+04	1.69e+04	-0.616	0.538	-4.36e
+04	2.28e+04					
ASSET_ID_194382		-7425.5624	2.41e+04	-0.309	0.758	-5.46e
+04	3.98e+04					
ASSET_ID_195075		-2390.3230	2.06e+04	-0.116	0.908	-4.27e
+04	3.8e+04					
ASSET_ID_195394		-8141.9812	2.16e+04	-0.378	0.706	-5.04e
+04	3.41e+04					
ASSET_ID_195400		2.666e+04	1.43e+04	1.869	0.062	-1319.
385	5.46e+04					
ASSET_ID_195409		8999.6340	2.11e+04	0.426	0.670	-3.24e
+04	5.04e+04					
ASSET_ID_195414		-1.347e+04	2.42e+04	-0.558	0.577	-6.09e
+04	3.39e+04					
ASSET_ID_195417		-1.277e+04	3.33e+04	-0.384	0.701	-7.8e
+04	5.25e+04					
ASSET_ID_195419		1.115e+04	1.34e+04	0.829	0.407	-1.52e
+04	3.75e+04					
ASSET_ID_195420		-3341.0696	3.12e+04	-0.107	0.915	-6.46e
+04	5.79e+04					
ASSET_ID_195421		-1840.7352	1.4e+04	-0.131	0.896	-2.93e
+04	2.57e+04					
ASSET_ID_195422		-249.0389	2.62e+04	-0.009	0.992	-5.17e
+04	5.12e+04					
ASSET_ID_195423		9621.0663	1.41e+04	0.684	0.494	-1.8e
+04	3.72e+04					
ASSET_ID_195424		9825.8603	1.39e+04	0.705	0.481	-1.75e
+04	3.72e+04					
ASSET_ID_195425		-1.509e+04	1.9e+04	-0.792	0.428	-5.24e
+04	2.23e+04					
ASSET_ID_195426		1986.0899	2.07e+04	0.096	0.924	-3.87e
+04	4.27e+04					
ASSET_ID_195428		-3873.6465	2.02e+04	-0.192	0.848	-4.34e
+04	3.57e+04					
ASSET_ID_195430		-6866.2247	2.02e+04	-0.341	0.733	-4.64e
+04	3.27e+04					
ASSET_ID_195432		8553.3343	2.19e+04	0.390	0.696	-3.44e

		reg_f				
+04	5.15e+04					
ASSET_ID_195433		1.781e+04	2.42e+04	0.735	0.462	-2.97e
+04	6.53e+04					
ASSET_ID_195530		2.207e+04	2.47e+04	0.892	0.372	-2.65e
+04	7.06e+04					
ASSET_ID_195531		3.015e+04	1.8e+04	1.671	0.095	-5243.
200	6.55e+04					
ASSET_ID_195534		-2610.4311	3.21e+04	-0.081	0.935	-6.55e
+04	6.03e+04					
ASSET_ID_195535		-2.091e+04	2.5e+04	-0.836	0.404	-7e
+04	2.82e+04					
ASSET_ID_195537		-7427.3894	3.12e+04	-0.238	0.812	-6.86e
+04	5.37e+04					
ASSET_ID_195538		5.611e+04	2.66e+04	2.105	0.035	3835.
863	1.08e+05					
ASSET_ID_196156		-1.601e+04	2.13e+04	-0.750	0.453	-5.79e
+04	2.58e+04					
ASSET_ID_196157		0	0	nan	nan	
0	0					
ASSET_ID_196158		-5546.1127	2.57e+04	-0.216	0.829	-5.6e
+04	4.49e+04					
ASSET_ID_196368		7627.8760	4.66e+04	0.164	0.870	-8.38e
+04	9.91e+04					
ASSET_ID_196369		7064.4654	3.34e+04	0.212	0.832	-5.84e
+04	7.25e+04					
ASSET_ID_196672		-3.494e+04	3.82e+04	-0.913	0.361	-1.1e
+05	4.01e+04					
ASSET_ID_196752		3.158e+04	1.46e+04	2.160	0.031	2908.
780	6.03e+04					
ASSET_ID_196759		4337.5064	1.98e+04	0.220	0.826	-3.44e
+04	4.31e+04					
ASSET_ID_196760		-5146.0143	1.9e+04	-0.270	0.787	-4.25e
+04	3.22e+04					
ASSET_ID_197303		1.052e+04	2.54e+04	0.413	0.679	-3.94e
+04	6.04e+04					
ASSET_ID_197323		1.094e+04	1.88e+04	0.581	0.562	-2.6e
+04	4.79e+04					
ASSET_ID_197581		1184.5754	3.75e+04	0.032	0.975	-7.24e
+04	7.47e+04					
ASSET_ID_199277		1.739e+04	2.4e+04	0.725	0.469	-2.97e
+04	6.44e+04					
ASSET_ID_199833		0	0	nan	nan	
0	0					
ASSET_ID_199834		-5732.6517	2.44e+04	-0.235	0.814	-5.35e
+04	4.21e+04					
ASSET_ID_199835		-3.276e+04	1.79e+04	-1.835	0.067	-6.78e
+04	2258.046					
ASSET_ID_199909		2.03e+04	3.22e+04	0.630	0.528	-4.29e
+04	8.34e+04					
ASSET_ID_199912		1.011e+04	2.52e+04	0.401	0.688	-3.93e
+04	5.96e+04					
ASSET_ID_199914		6.658e+04	3.05e+04	2.182	0.029	6728.
370	1.26e+05					
ASSET_ID_199915		-3849.1406	2.16e+04	-0.178	0.859	-4.62e
+04	3.85e+04					
ASSET_ID_200321		-1.301e+04	2.04e+04	-0.638	0.524	-5.3e
+04	2.7e+04					
ASSET_ID_200437		-2.225e+04	2.8e+04	-0.793	0.428	-7.73e
+04	3.28e+04					
ASSET_ID_202224		3.16e+04	3.09e+04	1.024	0.306	-2.89e

+04	9.21e+04					
DAY_PART_Daytime		9319.5541	3481.389	2.677	0.008	2491.
028	1.61e+04					
DAY_PART_Early Fringe		9.144e+04	4331.433	21.112	0.000	8.29e
+04	9.99e+04					
DAY_PART_Early Morning		-2.945e+04	8685.047	-3.391	0.001	-4.65e
+04	-1.24e+04					
DAY_PART_Late Fringe		8.739e+04	4609.040	18.960	0.000	7.83e
+04	9.64e+04					
DAY_PART_Late Night		-1.655e+04	3684.078	-4.493	0.000	-2.38e
+04	-9325.411					
RELEASE_YEAR_1939-01-01 00:00:00	-1.042e+04	1.69e+04	-0.616	0.538	-4.36e	
+04	2.28e+04					
RELEASE_YEAR_1947-01-01 00:00:00	-5310.8992	1.21e+04	-0.440	0.660	-2.9e	
+04	1.84e+04					
RELEASE_YEAR_1950-01-01 00:00:00	864.4221	2.21e+04	0.039	0.969	-4.24e	
+04	4.41e+04					
RELEASE_YEAR_1952-01-01 00:00:00	-3.276e+04	1.79e+04	-1.835	0.067	-6.78e	
+04	2258.046					
RELEASE_YEAR_1953-01-01 00:00:00	-4.468e+04	2.14e+04	-2.088	0.037	-8.66e	
+04	-2705.359					
RELEASE_YEAR_1954-01-01 00:00:00	4139.0073	1.52e+04	0.273	0.785	-2.56e	
+04	3.39e+04					
RELEASE_YEAR_1956-01-01 00:00:00	9143.8656	1.76e+04	0.519	0.604	-2.54e	
+04	4.37e+04					
RELEASE_YEAR_1958-01-01 00:00:00	6590.8000	2.48e+04	0.265	0.791	-4.21e	
+04	5.53e+04					
RELEASE_YEAR_1959-01-01 00:00:00	2.297e+04	1.75e+04	1.312	0.190	-1.14e	
+04	5.73e+04					
RELEASE_YEAR_1960-01-01 00:00:00	-2.178e+04	1.81e+04	-1.201	0.230	-5.74e	
+04	1.38e+04					
RELEASE_YEAR_1961-01-01 00:00:00	3311.4894	1.78e+04	0.186	0.853	-3.16e	
+04	3.83e+04					
RELEASE_YEAR_1962-01-01 00:00:00	-8042.1457	1.39e+04	-0.578	0.563	-3.53e	
+04	1.92e+04					
RELEASE_YEAR_1963-01-01 00:00:00	-1.876e+04	2.15e+04	-0.874	0.382	-6.09e	
+04	2.34e+04					
RELEASE_YEAR_1965-01-01 00:00:00	-5721.2679	1.75e+04	-0.328	0.743	-4e	
+04	2.85e+04					
RELEASE_YEAR_1966-01-01 00:00:00	5.728e+04	1.97e+04	2.914	0.004	1.87e	
+04	9.58e+04					
RELEASE_YEAR_1967-01-01 00:00:00	-5581.9873	1.41e+04	-0.395	0.693	-3.33e	
+04	2.22e+04					
RELEASE_YEAR_1968-01-01 00:00:00	2.576e+04	1.38e+04	1.867	0.062	-1300.	
458	5.28e+04					
RELEASE_YEAR_1970-01-01 00:00:00	-1.915e+04	1.56e+04	-1.227	0.220	-4.97e	
+04	1.15e+04					
RELEASE_YEAR_1972-01-01 00:00:00	-3.025e+04	1.3e+04	-2.323	0.020	-5.58e	
+04	-4707.690					
RELEASE_YEAR_1973-01-01 00:00:00	-9604.4261	1.4e+04	-0.684	0.494	-3.71e	
+04	1.79e+04					
RELEASE_YEAR_1974-01-01 00:00:00	594.1661	9471.518	0.063	0.950	-1.8e	
+04	1.92e+04					
RELEASE_YEAR_1975-01-01 00:00:00	-865.5651	1.1e+04	-0.079	0.937	-2.25e	
+04	2.07e+04					
RELEASE_YEAR_1976-01-01 00:00:00	-358.8075	1.24e+04	-0.029	0.977	-2.46e	
+04	2.39e+04					
RELEASE_YEAR_1977-01-01 00:00:00	-3353.8274	1.22e+04	-0.274	0.784	-2.73e	
+04	2.06e+04					
RELEASE_YEAR_1978-01-01 00:00:00	3098.7910	6253.607	0.496	0.620	-9167.	

269	1.54e+04							
	RELEASE_YEAR_1979-01-01 00:00:00	-2.222e+04	1.81e+04	-1.231	0.218	-5.76e		
+04	1.32e+04							
	RELEASE_YEAR_1980-01-01 00:00:00	9954.7466	1.06e+04	0.943	0.346	-1.08e		
+04	3.07e+04							
	RELEASE_YEAR_1981-01-01 00:00:00	3815.2679	9142.234	0.417	0.676	-1.41e		
+04	2.17e+04							
	RELEASE_YEAR_1982-01-01 00:00:00	-1.504e+04	1.21e+04	-1.240	0.215	-3.88e		
+04	8750.240							
	RELEASE_YEAR_1983-01-01 00:00:00	1.407e+04	7572.641	1.858	0.063	-781.		
316	2.89e+04							
	RELEASE_YEAR_1984-01-01 00:00:00	1.043e+04	1.22e+04	0.853	0.394	-1.36e		
+04	3.44e+04							
	RELEASE_YEAR_1985-01-01 00:00:00	1.129e+04	1e+04	1.124	0.261	-8410.		
995	3.1e+04							
	RELEASE_YEAR_1986-01-01 00:00:00	8132.9918	9683.671	0.840	0.401	-1.09e		
+04	2.71e+04							
	RELEASE_YEAR_1987-01-01 00:00:00	-9375.3463	1.31e+04	-0.716	0.474	-3.51e		
+04	1.63e+04							
	RELEASE_YEAR_1988-01-01 00:00:00	6340.7161	7203.163	0.880	0.379	-7787.		
840	2.05e+04							
	RELEASE_YEAR_1989-01-01 00:00:00	3636.3699	8187.874	0.444	0.657	-1.24e		
+04	1.97e+04							
	RELEASE_YEAR_1990-01-01 00:00:00	1626.1532	6531.387	0.249	0.803	-1.12e		
+04	1.44e+04							
	RELEASE_YEAR_1991-01-01 00:00:00	-1299.3645	9497.094	-0.137	0.891	-1.99e		
+04	1.73e+04							
	RELEASE_YEAR_1992-01-01 00:00:00	1.173e+04	1.13e+04	1.040	0.299	-1.04e		
+04	3.38e+04							
	RELEASE_YEAR_1993-01-01 00:00:00	8554.4066	7638.548	1.120	0.263	-6428.		
129	2.35e+04							
	RELEASE_YEAR_1994-01-01 00:00:00	-5182.2298	9869.819	-0.525	0.600	-2.45e		
+04	1.42e+04							
	RELEASE_YEAR_1995-01-01 00:00:00	1.737e+04	6617.939	2.625	0.009	4391.		
271	3.04e+04							
	RELEASE_YEAR_1996-01-01 00:00:00	6736.9703	7130.389	0.945	0.345	-7248.		
844	2.07e+04							
	RELEASE_YEAR_1997-01-01 00:00:00	1.395e+04	8888.346	1.569	0.117	-3486.		
271	3.14e+04							
	RELEASE_YEAR_1998-01-01 00:00:00	-1.13e+04	9266.868	-1.219	0.223	-2.95e		
+04	6880.792							
	RELEASE_YEAR_1999-01-01 00:00:00	-9973.8095	6032.372	-1.653	0.098	-2.18e		
+04	1858.311							
	RELEASE_YEAR_2000-01-01 00:00:00	4785.4168	6148.784	0.778	0.437	-7275.		
039	1.68e+04							
	RELEASE_YEAR_2001-01-01 00:00:00	1.032e+04	7433.586	1.388	0.165	-4262.		
736	2.49e+04							
	RELEASE_YEAR_2002-01-01 00:00:00	-1312.7594	5511.907	-0.238	0.812	-1.21e		
+04	9498.503							
	RELEASE_YEAR_2003-01-01 00:00:00	2370.6790	7987.598	0.297	0.767	-1.33e		
+04	1.8e+04							
	RELEASE_YEAR_2004-01-01 00:00:00	9269.1606	5180.936	1.789	0.074	-892.		
922	1.94e+04							
	RELEASE_YEAR_2005-01-01 00:00:00	6722.0853	7415.362	0.907	0.365	-7822.		
685	2.13e+04							
	RELEASE_YEAR_2006-01-01 00:00:00	1.989e+04	4341.361	4.581	0.000	1.14e		
+04	2.84e+04							
	RELEASE_YEAR_2007-01-01 00:00:00	4152.1559	8946.344	0.464	0.643	-1.34e		
+04	2.17e+04							
	RELEASE_YEAR_2008-01-01 00:00:00	-1953.9703	7388.594	-0.264	0.791	-1.64e		

+04	1.25e+04							
RELEASE_YEAR_2009-01-01 00:00:00	-947.2360	9778.408	-0.097	0.923	-2.01e			
+04	1.82e+04							
RELEASE_YEAR_2010-01-01 00:00:00	1.212e+04	6508.326	1.862	0.063	-647.			
352	2.49e+04							
RELEASE_YEAR_2011-01-01 00:00:00	1.667e+04	1.41e+04	1.182	0.237	-1.1e			
+04	4.43e+04							
MPAA_RATING_G	3.206e+04	1.66e+04	1.926	0.054	-585.			
621	6.47e+04							
MPAA_RATING_GP	-7622.9871	1.66e+04	-0.458	0.647	-4.02e			
+04	2.5e+04							
MPAA_RATING_M	8745.7251	1.68e+04	0.522	0.602	-2.41e			
+04	4.16e+04							
MPAA_RATING_NOT RATED	3.149e+04	1.63e+04	1.929	0.054	-528.			
950	6.35e+04							
MPAA_RATING_PG	1.01e+04	7012.866	1.440	0.150	-3657.			
020	2.39e+04							
MPAA_RATING_PG-13	1.955e+04	6604.468	2.961	0.003	6599.			
201	3.25e+04							
MPAA_RATING_R	1.293e+04	6479.472	1.996	0.046	225.			
250	2.56e+04							
MPAA_RATING_UNRATED	3.811e+04	1.65e+04	2.306	0.021	5701.			
118	7.05e+04							
MPAA_RATING_X	7723.7682	1.22e+04	0.631	0.528	-1.63e			
+04	3.17e+04							
TOMATO_IMAGE_fresh	-2884.5582	4152.879	-0.695	0.487	-1.1e			
+04	5261.055							
TOMATO_IMAGE_rotten	-2851.1471	6992.128	-0.408	0.684	-1.66e			
+04	1.09e+04							
<hr/>								
Omnibus:	85.329	Durbin-Watson:	2.029					
Prob(Omnibus):	0.000	Jarque-Bera (JB):	194.821					
Skew:	0.244	Prob(JB):	4.96e-43					
Kurtosis:	4.444	Cond. No.	2.64e+17					
<hr/>								

## Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The smallest eigenvalue is 1.06e-31. This might indicate that there are strong multicollinearity problems or that the design matrix is singular.

In [52]:

```
regressor = LinearRegression()
regressor.fit(x1_train,y1_train)
y1_pred = regressor.predict(x1_test)
```

In [53]:

```
def performance(x1_train_sm,y1_train, x1_test,y1_test):
    lin_reg = sm.OLS(y1_train,sm.add_constant(x1_train_sm)).fit()
    y_train_pred = lin_reg.predict(sm.add_constant(x1_train_sm))
    y_test_pred = lin_reg.predict(sm.add_constant(x1_test))
    print('Train R2',metrics.r2_score(y1_train,y_train_pred))
    print('Test R2',metrics.r2_score(y1_test,y_test_pred))
    print('-'*50)
    print('Train MAPE:', metrics.mean_absolute_percentage_error(y1_train,y_train_pred))
    print('Test MAPE:', metrics.mean_absolute_percentage_error(y1_test,y_test_pred))
    print('Cross Val Score of MAPE:')
    scores = -1*cross_val_score(LinearRegression(),x1_train,y1_train,cv=5,
                                scoring='neg_mean_absolute_percentage_error')
    bias = np.mean(scores)
```

```
variance = np.std(scores,ddof=1)
print('CV_scores:',scores)
print('Bias :',bias)
print('Variance:',variance)
```

In [54]: `performance(x1_train_sm,y1_train, x1_test,y1_test)`

```
Train R2 0.8099033129671758
Test R2 0.7839655133444481
-----
Train MAPE: 0.3456892481112837
Test MAPE: 0.41865232835348537
Cross Val Score of MAPE:
CV_scores: [4.95541380e+09 2.77485396e+09 7.38093251e+08 5.22816923e-01
4.19170308e+10]
Bias : 10077078359.781427
Variance: 17903216548.3935
```

## Model without removing multicollinearity and feature scaling

In [55]: `X = df1.iloc[:,df1.columns != 'AIRING_REVENUE']  
Y = df1['AIRING_REVENUE']`

In [56]: `X_train, X_test, y_train, y_test = train_test_split(X, Y, test_size=0.25, random_state=42)  
regressor = LinearRegression()  
regressor.fit(X_train,y_train)  
y_pred = regressor.predict(X_test)`

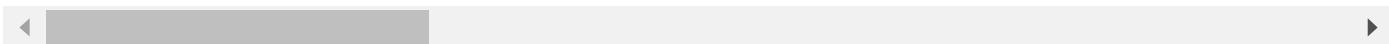
In [57]: `explained_variance=metrics.explained_variance_score(y_test, y_pred)  
mean_absolute_error=metrics.mean_absolute_error(y_test, y_pred)  
mse=metrics.mean_squared_error(y_test, y_pred)  
# mean_squared_log_error=metrics.mean_squared_log_error(y_test, y_pred)  
median_absolute_error=metrics.median_absolute_error(y_test, y_pred)  
r2=metrics.r2_score(y_test, y_pred)  
  
print('explained_variance: ', round(explained_variance,4))  
# print('mean_squared_log_error: ', round(mean_squared_log_error,4))  
print('r2: ', round(r2,4))  
print('MAE: ', round(mean_absolute_error,4))  
print('MSE: ', round(mse,4))  
print('RMSE: ', round(np.sqrt(mse),4))  
  
explained_variance: -39261.385  
r2: -39512.9302  
MAE: 2980582.7937  
MSE: 246039226544669.84  
RMSE: 15685637.5881`

In [58]: `x_train_sm = sm.add_constant(X_train)  
x_train_sm`

Out[58]:

	const	PREMIER_AIRING	EXHIBITION_AIRING	FREE_AIRING	SCHEDULED_RUNTIME	C3_RATING
<b>458</b>	1.0	0	1	0	120	302028.0
<b>503</b>	1.0	0	0	1	150	334858.0
<b>820</b>	1.0	0	1	0	180	1055966.0
<b>2056</b>	1.0	0	1	0	150	209500.0
<b>1473</b>	1.0	0	0	1	150	456119.0
...	...	...	...	...	...	...
<b>1033</b>	1.0	0	0	1	120	251901.0
<b>1731</b>	1.0	0	1	0	120	202965.0
<b>763</b>	1.0	0	1	0	150	170815.0
<b>835</b>	1.0	0	1	0	180	632918.0
<b>1653</b>	1.0	0	1	0	119	297863.0

1887 rows × 528 columns

In [59]: lr = sm.OLS(y\_train,x\_train\_sm).fit()  
print(lr.summary())

## OLS Regression Results

Dep. Variable:	AIRING_REVENUE	R-squared:	0.811		
Model:	OLS	Adj. R-squared:	0.761		
Method:	Least Squares	F-statistic:	16.24		
Date:	Wed, 12 Oct 2022	Prob (F-statistic):	0.00		
Time:	16:41:19	Log-Likelihood:	-22318.		
No. Observations:	1887	AIC:	4.543e+04		
Df Residuals:	1491	BIC:	4.762e+04		
Df Model:	395				
Covariance Type:	nonrobust				
025	0.975]				
		coef	std err	t	P> t
const		-1.606e+04	1.78e+04	-0.900	0.368
+04	1.89e+04				-5.11e
PREMIER_AIRING		-3625.1130	5233.040	-0.693	0.489
+04	6639.790				-1.39e
EXHIBITION_AIRING		-4895.1386	9013.104	-0.543	0.587
+04	1.28e+04				-2.26e
FREE_AIRING		-1.117e+04	8962.952	-1.246	0.213
+04	6414.203				-2.87e
SCHEDULED_RUNTIME		101.3935	624.795	0.162	0.871
177	1326.965				-1124.
C3_RATING		0.0954	0.007	13.127	0.000
081	0.110				0.
IMDB_RATING		4199.3626	6839.735	0.614	0.539
163	1.76e+04				-9217.
IMDB_RANKING		-129.4140	237.529	-0.545	0.586
340	336.512				-595.
IMDB_VOTES		0.0492	0.015	3.238	0.001
019	0.079				0.
Oscar-Nomination		1885.0391	2235.669	0.843	0.399
352	6270.430				-2500.
Oscar-Wins		4742.3870	4509.358	1.052	0.293
973	1.36e+04				-4102.
Other - Nominations		16.0033	365.394	0.044	0.965
738	732.744				-700.
Other - Wins		-214.8699	392.363	-0.548	0.584
511	554.771				-984.
TOMATO_METER		-217.1062	351.911	-0.617	0.537
400	473.187				-907.
TOMATO_RATING		2580.7491	7336.313	0.352	0.725
+04	1.7e+04				-1.18e
TOMATO_REVIEWS		25.3063	283.558	0.089	0.929
910	581.522				-530.
TOMATO_FRESH		62.2195	293.776	0.212	0.832
040	638.479				-514.
TOMATO_ROTTEN		-3.2148	276.253	-0.012	0.991
101	538.672				-545.
TOMATO_USER_METER		-119.0499	228.744	-0.520	0.603
743	329.644				-567.
TOMATO_USER_RATINGS		293.9527	7474.021	0.039	0.969
+04	1.5e+04				-1.44e
TOMATO_USER_REVIEWS		-5.679e-05	0.000	-0.212	0.832
001	0.000				-0.
BOX_OFFICE_EARNINGS		6.385e-05	4.26e-05	1.499	0.134
					-1.97e

-05	0.000					
Action		5843.2314	4311.412	1.355	0.176	-2613.
847	1.43e+04					
Adventure		4101.0813	6051.779	0.678	0.498	-7769.
824	1.6e+04					
Biography		9982.2930	7159.845	1.394	0.163	-4062.
147	2.4e+04					
Comedy		-1.076e+04	5545.931	-1.940	0.053	-2.16e
+04	120.226					
Crime		-2153.5931	6770.584	-0.318	0.750	-1.54e
+04	1.11e+04					
Documentary		1393.3048	1.15e+04	0.121	0.904	-2.12e
+04	2.4e+04					
Drama		-940.1487	4617.830	-0.204	0.839	-9998.
282	8117.985					
Family		2443.4627	6788.819	0.360	0.719	-1.09e
+04	1.58e+04					
Fantasy		1.209e+04	5098.728	2.372	0.018	2090.
964	2.21e+04					
History		8815.3012	9992.110	0.882	0.378	-1.08e
+04	2.84e+04					
Horror		7693.4507	5334.350	1.442	0.149	-2770.
178	1.82e+04					
Music		-4834.7040	1.06e+04	-0.456	0.649	-2.56e
+04	1.6e+04					
Musical		-1164.2554	9217.639	-0.126	0.900	-1.92e
+04	1.69e+04					
Mystery		6223.4253	5731.030	1.086	0.278	-5018.
314	1.75e+04					
Romance		3516.9700	5663.033	0.621	0.535	-7591.
389	1.46e+04					
Sci-Fi		-6089.9791	4676.319	-1.302	0.193	-1.53e
+04	3082.884					
Short		-5286.3783	1.06e+04	-0.499	0.618	-2.61e
+04	1.55e+04					
Sport		1.112e+04	9512.404	1.169	0.243	-7539.
836	2.98e+04					
Thriller		-3771.3194	4020.389	-0.938	0.348	-1.17e
+04	4114.900					
War		1823.9605	8671.317	0.210	0.833	-1.52e
+04	1.88e+04					
Western		-1039.6663	9571.050	-0.109	0.914	-1.98e
+04	1.77e+04					
ASSET_ID_171652		-2.481e+04	2.5e+04	-0.991	0.322	-7.39e
+04	2.43e+04					
ASSET_ID_171685		-1.521e+04	2.17e+04	-0.702	0.483	-5.77e
+04	2.73e+04					
ASSET_ID_171709		-1.688e+04	2.64e+04	-0.639	0.523	-6.87e
+04	3.49e+04					
ASSET_ID_171731		0.0007	0.000	1.646	0.100	-0.
000	0.002					
ASSET_ID_171790		-2.124e+04	1.76e+04	-1.207	0.228	-5.58e
+04	1.33e+04					
ASSET_ID_171794		3.632e+04	1.29e+04	2.813	0.005	1.1e
+04	6.17e+04					
ASSET_ID_171859		-2.607e+04	2.54e+04	-1.026	0.305	-7.59e
+04	2.37e+04					
ASSET_ID_171962		1.168e+04	1.46e+04	0.800	0.424	-1.69e
+04	4.03e+04					
ASSET_ID_171966		-2.824e+04	1.97e+04	-1.435	0.152	-6.69e

		reg_f				
+04	1.04e+04					
ASSET_ID_171969		-5.591e+04	1.57e+04	-3.568	0.000	-8.66e
+04	-2.52e+04					
ASSET_ID_171974		-2.563e+04	2.37e+04	-1.080	0.280	-7.22e
+04	2.09e+04					
ASSET_ID_171976		-8430.5965	1.5e+04	-0.560	0.575	-3.8e
+04	2.11e+04					
ASSET_ID_171978		-3899.1090	2.04e+04	-0.191	0.848	-4.39e
+04	3.61e+04					
ASSET_ID_171982		-0.0005	0.001	-0.770	0.441	-0.
002	0.001					
ASSET_ID_171983		-6565.5117	1.32e+04	-0.497	0.619	-3.25e
+04	1.93e+04					
ASSET_ID_171986		6243.3722	1.52e+04	0.412	0.681	-2.35e
+04	3.6e+04					
ASSET_ID_171988		2.324e+04	1.39e+04	1.672	0.095	-4021.
881	5.05e+04					
ASSET_ID_171991		-1.038e+04	1.91e+04	-0.542	0.588	-4.79e
+04	2.72e+04					
ASSET_ID_171996		6.754e+04	3.22e+04	2.096	0.036	4326.
968	1.31e+05					
ASSET_ID_172003		-3917.5069	1.47e+04	-0.267	0.790	-3.27e
+04	2.49e+04					
ASSET_ID_172005		499.7604	2.11e+04	0.024	0.981	-4.09e
+04	4.19e+04					
ASSET_ID_172006		-7195.9708	2.48e+04	-0.290	0.772	-5.59e
+04	4.15e+04					
ASSET_ID_172007		1.451e+04	2.64e+04	0.550	0.583	-3.73e
+04	6.63e+04					
ASSET_ID_172009		-2.262e+04	1.63e+04	-1.388	0.165	-5.46e
+04	9345.739					
ASSET_ID_172015		2.012e+04	1.57e+04	1.283	0.200	-1.07e
+04	5.09e+04					
ASSET_ID_172026		-2.51e+04	1.48e+04	-1.692	0.091	-5.42e
+04	4001.988					
ASSET_ID_172027		1.499e+04	1.96e+04	0.766	0.444	-2.34e
+04	5.34e+04					
ASSET_ID_172036		-1.4e+04	2.17e+04	-0.645	0.519	-5.66e
+04	2.86e+04					
ASSET_ID_172044		-8230.3290	2.5e+04	-0.329	0.742	-5.73e
+04	4.09e+04					
ASSET_ID_172048		1.726e+04	1.33e+04	1.296	0.195	-8869.
323	4.34e+04					
ASSET_ID_172055		-5389.0171	3.14e+04	-0.171	0.864	-6.71e
+04	5.63e+04					
ASSET_ID_172070		-5803.9303	3.19e+04	-0.182	0.856	-6.84e
+04	5.68e+04					
ASSET_ID_172074		-460.7094	3.15e+04	-0.015	0.988	-6.22e
+04	6.13e+04					
ASSET_ID_172077		3.154e+04	2.81e+04	1.123	0.262	-2.36e
+04	8.66e+04					
ASSET_ID_172142		626.5327	2.19e+04	0.029	0.977	-4.23e
+04	4.36e+04					
ASSET_ID_172197		3860.3957	3.38e+04	0.114	0.909	-6.25e
+04	7.02e+04					
ASSET_ID_172232		-2.722e+04	3.29e+04	-0.827	0.408	-9.17e
+04	3.73e+04					
ASSET_ID_172263		895.0985	3.27e+04	0.027	0.978	-6.33e
+04	6.51e+04					
ASSET_ID_172294		-2.671e+04	1.92e+04	-1.394	0.164	-6.43e

			reg_f			
+04	1.09e+04					
ASSET_ID_172299		3456.8664	1.7e+04	0.204	0.839	-2.98e
+04	3.67e+04					
ASSET_ID_172300		-6935.1500	1.79e+04	-0.387	0.699	-4.21e
+04	2.82e+04					
ASSET_ID_172319		-1.066e+04	2.77e+04	-0.384	0.701	-6.5e
+04	4.37e+04					
ASSET_ID_172320		-0.0016	0.001	-1.213	0.225	-0.
004	0.001					
ASSET_ID_172378		-2.574e+04	3.48e+04	-0.740	0.459	-9.4e
+04	4.25e+04					
ASSET_ID_172380		1218.9052	3.2e+04	0.038	0.970	-6.16e
+04	6.4e+04					
ASSET_ID_172381		-0.0004	0.000	-1.484	0.138	-0.
001	0.000					
ASSET_ID_172389		1670.7902	3.25e+04	0.051	0.959	-6.21e
+04	6.55e+04					
ASSET_ID_172392		-2973.2618	1.13e+04	-0.264	0.792	-2.51e
+04	1.91e+04					
ASSET_ID_172393		-9560.1127	2.33e+04	-0.410	0.682	-5.53e
+04	3.62e+04					
ASSET_ID_172398		2.033e+04	2.97e+04	0.684	0.494	-3.8e
+04	7.87e+04					
ASSET_ID_172406		-2.969e+04	1.89e+04	-1.569	0.117	-6.68e
+04	7432.429					
ASSET_ID_172410		1067.0453	3.24e+04	0.033	0.974	-6.24e
+04	6.46e+04					
ASSET_ID_172416		-0.0003	0.000	-1.427	0.154	-0.
001	9.74e-05					
ASSET_ID_172419		-2.158e+04	3.07e+04	-0.703	0.482	-8.18e
+04	3.86e+04					
ASSET_ID_172423		-0.0003	0.000	-0.949	0.343	-0.
001	0.000					
ASSET_ID_172429		3307.1958	1.68e+04	0.197	0.844	-2.96e
+04	3.62e+04					
ASSET_ID_172439		1.625e+04	3.57e+04	0.455	0.649	-5.38e
+04	8.63e+04					
ASSET_ID_172441		-3.2e+04	2.68e+04	-1.196	0.232	-8.45e
+04	2.05e+04					
ASSET_ID_172450		-3109.0801	1.31e+04	-0.237	0.812	-2.88e
+04	2.26e+04					
ASSET_ID_172460		-2.363e+04	2.25e+04	-1.052	0.293	-6.77e
+04	2.04e+04					
ASSET_ID_172472		1.644e+04	2.08e+04	0.791	0.429	-2.43e
+04	5.72e+04					
ASSET_ID_172481		5.898e+04	2.4e+04	2.456	0.014	1.19e
+04	1.06e+05					
ASSET_ID_172507		-5457.2565	1.63e+04	-0.335	0.738	-3.74e
+04	2.65e+04					
ASSET_ID_172510		-0.0015	0.001	-1.411	0.158	-0.
004	0.001					
ASSET_ID_172521		-0.0010	0.001	-1.284	0.199	-0.
003	0.001					
ASSET_ID_172597		2331.3434	2.72e+04	0.086	0.932	-5.1e
+04	5.56e+04					
ASSET_ID_172695		-1.368e+04	1.69e+04	-0.809	0.419	-4.68e
+04	1.95e+04					
ASSET_ID_172707		-2.141e+04	4.23e+04	-0.506	0.613	-1.04e
+05	6.16e+04					
ASSET_ID_172741		-8259.6592	1.5e+04	-0.552	0.581	-3.76e

		reg_f				
+04	2.11e+04					
ASSET_ID_172790		-1.36e+04	2.14e+04	-0.636	0.525	-5.55e
+04	2.83e+04					
ASSET_ID_172793		-1.544e+04	3.73e+04	-0.414	0.679	-8.86e
+04	5.77e+04					
ASSET_ID_172823		-5345.4211	1.3e+04	-0.410	0.682	-3.09e
+04	2.02e+04					
ASSET_ID_172824		-2.345e+04	3.64e+04	-0.644	0.519	-9.48e
+04	4.79e+04					
ASSET_ID_172826		-1.285e+04	2.09e+04	-0.616	0.538	-5.38e
+04	2.81e+04					
ASSET_ID_172830		2.365e+04	1.81e+04	1.305	0.192	-1.19e
+04	5.92e+04					
ASSET_ID_172834		-3.029e+04	3.77e+04	-0.802	0.422	-1.04e
+05	4.38e+04					
ASSET_ID_172836		1.103e+05	3.14e+04	3.517	0.000	4.88e
+04	1.72e+05					
ASSET_ID_172855		0.0005	0.000	1.902	0.057	-1.47e
-05	0.001					
ASSET_ID_172856		1.211e+04	2.69e+04	0.450	0.653	-4.06e
+04	6.49e+04					
ASSET_ID_172872		-1.776e+04	1.59e+04	-1.116	0.265	-4.9e
+04	1.35e+04					
ASSET_ID_172873		47.8327	1.87e+04	0.003	0.998	-3.66e
+04	3.67e+04					
ASSET_ID_172880		3.411e+04	2.38e+04	1.431	0.153	-1.26e
+04	8.08e+04					
ASSET_ID_172893		-2.178e+04	2.23e+04	-0.975	0.330	-6.56e
+04	2.2e+04					
ASSET_ID_172895		2.288e+04	1.85e+04	1.235	0.217	-1.35e
+04	5.92e+04					
ASSET_ID_172900		-2.003e+04	2.42e+04	-0.829	0.407	-6.74e
+04	2.74e+04					
ASSET_ID_172908		2.163e+04	1.33e+04	1.632	0.103	-4366.
352	4.76e+04					
ASSET_ID_172915		3487.2532	1.8e+04	0.194	0.846	-3.18e
+04	3.88e+04					
ASSET_ID_172918		-2.818e+04	1.93e+04	-1.463	0.144	-6.6e
+04	9594.310					
ASSET_ID_172919		-1.544e+04	2.24e+04	-0.691	0.490	-5.93e
+04	2.84e+04					
ASSET_ID_172920		3.568e+04	2.79e+04	1.277	0.202	-1.91e
+04	9.05e+04					
ASSET_ID_172951		-1.918e+04	2.06e+04	-0.929	0.353	-5.97e
+04	2.13e+04					
ASSET_ID_172952		-2.472e+04	2.49e+04	-0.994	0.321	-7.35e
+04	2.41e+04					
ASSET_ID_173007		-3.593e+04	2.92e+04	-1.232	0.218	-9.32e
+04	2.13e+04					
ASSET_ID_173041		-2.42e+04	3.31e+04	-0.732	0.464	-8.91e
+04	4.07e+04					
ASSET_ID_173046		1.189e+04	1.63e+04	0.729	0.466	-2.01e
+04	4.39e+04					
ASSET_ID_173047		-0.0014	0.001	-1.270	0.204	-0.
004	0.001					
ASSET_ID_173071		5351.2994	2.63e+04	0.203	0.839	-4.63e
+04	5.7e+04					
ASSET_ID_173077		1.207e+04	1.38e+04	0.873	0.383	-1.51e
+04	3.92e+04					
ASSET_ID_173084		-1.818e+04	1.11e+04	-1.643	0.101	-3.99e

			reg_f			
+04	3525.042					
ASSET_ID_173259		3.668e+04	3.23e+04	1.137	0.256	-2.66e
+04	1e+05					
ASSET_ID_173264		3508.7873	1.33e+04	0.263	0.792	-2.26e
+04	2.97e+04					
ASSET_ID_173267		-1.179e+04	3.12e+04	-0.378	0.705	-7.29e
+04	4.93e+04					
ASSET_ID_173275		4.771e+04	2.42e+04	1.974	0.049	294.
739	9.51e+04					
ASSET_ID_173288		-1.386e+04	3.36e+04	-0.413	0.680	-7.97e
+04	5.2e+04					
ASSET_ID_173293		-2.037e+04	3.32e+04	-0.613	0.540	-8.55e
+04	4.48e+04					
ASSET_ID_173295		-4575.4884	1.87e+04	-0.244	0.807	-4.13e
+04	3.22e+04					
ASSET_ID_173298		9.346e+04	3.81e+04	2.453	0.014	1.87e
+04	1.68e+05					
ASSET_ID_173300		-2.833e+04	1.55e+04	-1.824	0.068	-5.88e
+04	2132.140					
ASSET_ID_173325		-6389.7357	1.31e+04	-0.487	0.626	-3.21e
+04	1.93e+04					
ASSET_ID_173328		4.432e+04	2.6e+04	1.706	0.088	-6651.
000	9.53e+04					
ASSET_ID_173329		1.175e+04	2.02e+04	0.581	0.561	-2.79e
+04	5.14e+04					
ASSET_ID_173337		1876.0480	1.44e+04	0.131	0.896	-2.63e
+04	3.01e+04					
ASSET_ID_173350		2.762e+04	1.15e+04	2.397	0.017	5014.
707	5.02e+04					
ASSET_ID_173353		3186.3912	3.77e+04	0.085	0.933	-7.08e
+04	7.71e+04					
ASSET_ID_173388		1.288e+04	2.31e+04	0.559	0.577	-3.24e
+04	5.81e+04					
ASSET_ID_173393		4.667e+04	1.66e+04	2.819	0.005	1.42e
+04	7.91e+04					
ASSET_ID_173395		2736.9881	1.34e+04	0.205	0.838	-2.35e
+04	2.9e+04					
ASSET_ID_173399		-1.331e+04	2.68e+04	-0.496	0.620	-6.6e
+04	3.93e+04					
ASSET_ID_173446		-1.468e+04	3.29e+04	-0.447	0.655	-7.91e
+04	4.98e+04					
ASSET_ID_173451		1.843e+04	2.11e+04	0.873	0.383	-2.3e
+04	5.98e+04					
ASSET_ID_173455		-1.685e+04	3.41e+04	-0.494	0.621	-8.37e
+04	5e+04					
ASSET_ID_173469		-2.864e+04	3.82e+04	-0.750	0.453	-1.04e
+05	4.62e+04					
ASSET_ID_173492		1.81e+04	2.42e+04	0.748	0.455	-2.94e
+04	6.56e+04					
ASSET_ID_173505		1.985e+04	1.27e+04	1.568	0.117	-4983.
461	4.47e+04					
ASSET_ID_173508		-930.4998	3.44e+04	-0.027	0.978	-6.85e
+04	6.66e+04					
ASSET_ID_173600		7006.1413	1.68e+04	0.418	0.676	-2.59e
+04	3.99e+04					
ASSET_ID_173614		-1.309e+04	1.34e+04	-0.976	0.329	-3.94e
+04	1.32e+04					
ASSET_ID_173683		-4.77e+04	2.21e+04	-2.155	0.031	-9.11e
+04	-4274.545					
ASSET_ID_173684		-2.867e+04	3.55e+04	-0.807	0.420	-9.84e

+04	4.1e+04					
ASSET_ID_173687		7233.3944	3.52e+04	0.206	0.837	-6.18e
+04	7.63e+04					
ASSET_ID_173695		-3.905e+04	2.29e+04	-1.707	0.088	-8.39e
+04	5827.106					
ASSET_ID_173703		2.955e+04	1.78e+04	1.663	0.097	-5314.
785	6.44e+04					
ASSET_ID_173707		-6401.9903	1.69e+04	-0.379	0.705	-3.95e
+04	2.67e+04					
ASSET_ID_173714		-1.566e+04	1.16e+04	-1.353	0.176	-3.84e
+04	7036.036					
ASSET_ID_173725		6151.8788	1.53e+04	0.402	0.688	-2.39e
+04	3.62e+04					
ASSET_ID_173735		-1.724e+04	2.04e+04	-0.845	0.398	-5.73e
+04	2.28e+04					
ASSET_ID_173738		-26.1604	1.85e+04	-0.001	0.999	-3.62e
+04	3.62e+04					
ASSET_ID_173743		-3757.8521	1.76e+04	-0.213	0.831	-3.83e
+04	3.08e+04					
ASSET_ID_173763		-1502.4374	1.18e+04	-0.128	0.898	-2.46e
+04	2.16e+04					
ASSET_ID_173770		7251.1394	2.07e+04	0.350	0.727	-3.34e
+04	4.79e+04					
ASSET_ID_173771		-1.747e+04	1.56e+04	-1.122	0.262	-4.8e
+04	1.31e+04					
ASSET_ID_173804		2.713e+04	3.66e+04	0.742	0.458	-4.46e
+04	9.89e+04					
ASSET_ID_173877		-0.0001	8.24e-05	-1.444	0.149	-0.
000	4.26e-05					
ASSET_ID_173919		5966.7762	2.07e+04	0.288	0.774	-3.47e
+04	4.67e+04					
ASSET_ID_173927		-0.0007	0.000	-1.488	0.137	-0.
002	0.000					
ASSET_ID_174052		-1.359e+04	2.55e+04	-0.534	0.593	-6.35e
+04	3.63e+04					
ASSET_ID_174057		1.298e+04	2.45e+04	0.530	0.596	-3.51e
+04	6.1e+04					
ASSET_ID_174145		-1.542e+04	1.58e+04	-0.976	0.329	-4.64e
+04	1.56e+04					
ASSET_ID_174149		-4004.7308	1.41e+04	-0.283	0.777	-3.17e
+04	2.37e+04					
ASSET_ID_174174		-2146.6397	2.52e+04	-0.085	0.932	-5.16e
+04	4.73e+04					
ASSET_ID_174191		-1.185e+04	3.52e+04	-0.336	0.737	-8.1e
+04	5.73e+04					
ASSET_ID_174201		9100.7226	2.43e+04	0.374	0.708	-3.86e
+04	5.68e+04					
ASSET_ID_174206		-5180.6031	2.09e+04	-0.248	0.804	-4.62e
+04	3.58e+04					
ASSET_ID_174210		-4.879e+04	2.05e+04	-2.375	0.018	-8.91e
+04	-8499.965					
ASSET_ID_174224		-8906.4930	2.57e+04	-0.347	0.729	-5.93e
+04	4.15e+04					
ASSET_ID_174241		-2.335e+04	2.58e+04	-0.906	0.365	-7.39e
+04	2.72e+04					
ASSET_ID_174243		-8854.1968	2.71e+04	-0.326	0.744	-6.21e
+04	4.44e+04					
ASSET_ID_174264		2.626e+04	3.31e+04	0.795	0.427	-3.86e
+04	9.11e+04					
ASSET_ID_174283		1.486e+04	1.79e+04	0.830	0.407	-2.03e

			reg_f			
+04	5e+04					
ASSET_ID_174380		2299.5803	1.89e+04	0.122	0.903	-3.47e
+04	3.93e+04					
ASSET_ID_174384		3810.6377	3.63e+04	0.105	0.916	-6.74e
+04	7.5e+04					
ASSET_ID_174543		-5124.9626	1.63e+04	-0.315	0.753	-3.71e
+04	2.68e+04					
ASSET_ID_174569		2460.2107	1.12e+04	0.219	0.826	-1.95e
+04	2.45e+04					
ASSET_ID_174607		1.224e+04	2.18e+04	0.562	0.574	-3.05e
+04	5.5e+04					
ASSET_ID_174615		-3.662e+04	2.96e+04	-1.237	0.216	-9.47e
+04	2.14e+04					
ASSET_ID_174617		3.828e+04	1.85e+04	2.072	0.038	2034.
263	7.45e+04					
ASSET_ID_174618		-5713.3174	3.42e+04	-0.167	0.867	-7.28e
+04	6.14e+04					
ASSET_ID_174619		1.558e+04	2.35e+04	0.664	0.507	-3.05e
+04	6.16e+04					
ASSET_ID_174620		-0.0004	0.000	-1.898	0.058	-0.
001	1.25e-05					
ASSET_ID_174628		-8625.8758	2.74e+04	-0.315	0.753	-6.24e
+04	4.52e+04					
ASSET_ID_174631		-3.752e+04	3.15e+04	-1.193	0.233	-9.92e
+04	2.42e+04					
ASSET_ID_174637		463.7597	2.21e+04	0.021	0.983	-4.28e
+04	4.37e+04					
ASSET_ID_174648		4.663e+04	3.23e+04	1.446	0.148	-1.66e
+04	1.1e+05					
ASSET_ID_174650		-7.75e+04	3.48e+04	-2.225	0.026	-1.46e
+05	-9166.578					
ASSET_ID_174652		2.389e+04	2.42e+04	0.987	0.324	-2.36e
+04	7.14e+04					
ASSET_ID_174657		-1.267e+04	2.47e+04	-0.512	0.609	-6.12e
+04	3.58e+04					
ASSET_ID_174677		-1.481e+04	2.12e+04	-0.699	0.485	-5.64e
+04	2.68e+04					
ASSET_ID_174683		-4.077e+04	1.89e+04	-2.157	0.031	-7.79e
+04	-3686.683					
ASSET_ID_174687		0.0015	0.001	1.294	0.196	-0.
001	0.004					
ASSET_ID_174689		-1.484e+04	2.71e+04	-0.547	0.585	-6.81e
+04	3.84e+04					
ASSET_ID_174691		-3.458e+04	2.42e+04	-1.429	0.153	-8.2e
+04	1.29e+04					
ASSET_ID_174695		4.169e+04	1.64e+04	2.536	0.011	9439.
462	7.39e+04					
ASSET_ID_174721		-2.092e+04	2.32e+04	-0.904	0.366	-6.63e
+04	2.45e+04					
ASSET_ID_174726		-1.964e+04	1.92e+04	-1.024	0.306	-5.73e
+04	1.8e+04					
ASSET_ID_174748		-1.804e+04	2.27e+04	-0.793	0.428	-6.26e
+04	2.66e+04					
ASSET_ID_174762		-5801.4177	2.52e+04	-0.230	0.818	-5.53e
+04	4.37e+04					
ASSET_ID_174801		-8066.4560	2.42e+04	-0.333	0.739	-5.56e
+04	3.95e+04					
ASSET_ID_174839		-2987.6722	2.42e+04	-0.123	0.902	-5.05e
+04	4.45e+04					
ASSET_ID_174875		2383.1725	3.21e+04	0.074	0.941	-6.07e

			reg_f			
+04	6.54e+04					
ASSET_ID_174905		-9770.3996	1.5e+04	-0.650	0.516	-3.93e
+04	1.97e+04					
ASSET_ID_174909		5714.7289	1.46e+04	0.392	0.695	-2.29e
+04	3.43e+04					
ASSET_ID_174910		-1.349e+04	2.89e+04	-0.466	0.641	-7.02e
+04	4.33e+04					
ASSET_ID_174991		4616.6165	1.72e+04	0.268	0.789	-2.92e
+04	3.84e+04					
ASSET_ID_175013		-0.0004	0.000	-1.272	0.203	-0.
001	0.000					
ASSET_ID_175026		-1.904e+04	2.18e+04	-0.873	0.383	-6.18e
+04	2.37e+04					
ASSET_ID_175027		-6666.6505	3.19e+04	-0.209	0.835	-6.92e
+04	5.59e+04					
ASSET_ID_175029		3.299e+04	2.26e+04	1.457	0.145	-1.14e
+04	7.74e+04					
ASSET_ID_175030		-2.108e+04	2.23e+04	-0.944	0.345	-6.49e
+04	2.27e+04					
ASSET_ID_175031		1.466e+04	2.65e+04	0.553	0.580	-3.73e
+04	6.66e+04					
ASSET_ID_175034		4.126e+04	3.49e+04	1.183	0.237	-2.72e
+04	1.1e+05					
ASSET_ID_175071		5913.7836	3.26e+04	0.181	0.856	-5.81e
+04	6.99e+04					
ASSET_ID_175073		-0.0009	0.001	-1.155	0.248	-0.
003	0.001					
ASSET_ID_175081		1.792e+04	2.6e+04	0.688	0.491	-3.32e
+04	6.9e+04					
ASSET_ID_181137		-7031.0626	3.67e+04	-0.191	0.848	-7.91e
+04	6.5e+04					
ASSET_ID_181138		2651.3995	2.19e+04	0.121	0.904	-4.04e
+04	4.57e+04					
ASSET_ID_181141		-3.018e+04	2.94e+04	-1.027	0.305	-8.78e
+04	2.75e+04					
ASSET_ID_181142		1.843e+04	3.14e+04	0.586	0.558	-4.32e
+04	8.01e+04					
ASSET_ID_181143		2.789e+04	1.62e+04	1.724	0.085	-3834.
524	5.96e+04					
ASSET_ID_181145		4392.8777	2.31e+04	0.190	0.849	-4.1e
+04	4.97e+04					
ASSET_ID_181146		-2.684e+04	2.94e+04	-0.914	0.361	-8.45e
+04	3.08e+04					
ASSET_ID_181157		-4.589e+04	3.44e+04	-1.332	0.183	-1.13e
+05	2.17e+04					
ASSET_ID_181158		-5210.8293	2.56e+04	-0.204	0.838	-5.53e
+04	4.49e+04					
ASSET_ID_181161		-5450.7729	3.37e+04	-0.162	0.871	-7.15e
+04	6.06e+04					
ASSET_ID_181163		3890.8246	2.22e+04	0.175	0.861	-3.96e
+04	4.74e+04					
ASSET_ID_181604		1.093e+04	1.85e+04	0.591	0.554	-2.53e
+04	4.72e+04					
ASSET_ID_181751		-8648.9575	3.13e+04	-0.276	0.783	-7.01e
+04	5.28e+04					
ASSET_ID_181753		-1.576e+04	1.56e+04	-1.010	0.313	-4.64e
+04	1.48e+04					
ASSET_ID_181758		-9662.8709	2.02e+04	-0.479	0.632	-4.92e
+04	2.99e+04					
ASSET_ID_181759		1.735e+04	1.45e+04	1.199	0.231	-1.1e

		reg_f				
+04	4.57e+04					
ASSET_ID_181760		1.12e+04	1.61e+04	0.696	0.486	-2.04e
+04	4.28e+04					
ASSET_ID_181762		-1.006e+04	2.9e+04	-0.348	0.728	-6.69e
+04	4.67e+04					
ASSET_ID_181763		-3.796e+04	2.76e+04	-1.376	0.169	-9.21e
+04	1.62e+04					
ASSET_ID_181766		1523.3291	1.25e+04	0.122	0.903	-2.29e
+04	2.6e+04					
ASSET_ID_182769		3.303e+04	2.28e+04	1.447	0.148	-1.18e
+04	7.78e+04					
ASSET_ID_182887		1.043e+04	1.96e+04	0.533	0.594	-2.8e
+04	4.89e+04					
ASSET_ID_185234		4.253e+04	2.26e+04	1.886	0.060	-1708.
246	8.68e+04					
ASSET_ID_185235		2.183e+04	1.8e+04	1.213	0.225	-1.35e
+04	5.71e+04					
ASSET_ID_185242		1.359e+04	1.36e+04	1.003	0.316	-1.3e
+04	4.02e+04					
ASSET_ID_185245		1.629e+04	1.99e+04	0.819	0.413	-2.27e
+04	5.53e+04					
ASSET_ID_185257		2.522e+04	1.6e+04	1.572	0.116	-6243.
553	5.67e+04					
ASSET_ID_185269		-2.921e+04	3.84e+04	-0.761	0.447	-1.04e
+05	4.61e+04					
ASSET_ID_185298		-4.933e+04	2.62e+04	-1.884	0.060	-1.01e
+05	2017.259					
ASSET_ID_185300		2.601e+04	3.34e+04	0.779	0.436	-3.95e
+04	9.15e+04					
ASSET_ID_185302		4.26e+04	2.38e+04	1.787	0.074	-4159.
779	8.94e+04					
ASSET_ID_185303		1.044e+04	1.21e+04	0.861	0.389	-1.33e
+04	3.42e+04					
ASSET_ID_185304		-8586.4595	2.78e+04	-0.309	0.757	-6.31e
+04	4.59e+04					
ASSET_ID_185309		1.911e+04	1.73e+04	1.107	0.269	-1.48e
+04	5.3e+04					
ASSET_ID_185311		-5.082e+04	2.73e+04	-1.863	0.063	-1.04e
+05	2684.071					
ASSET_ID_185324		-1077.6746	1.54e+04	-0.070	0.944	-3.12e
+04	2.91e+04					
ASSET_ID_185326		-1.132e+04	2.34e+04	-0.484	0.628	-5.72e
+04	3.45e+04					
ASSET_ID_185336		-7315.9897	1.71e+04	-0.427	0.669	-4.09e
+04	2.63e+04					
ASSET_ID_185337		7118.5925	2e+04	0.357	0.721	-3.2e
+04	4.63e+04					
ASSET_ID_185344		-2.542e+04	1.96e+04	-1.298	0.194	-6.38e
+04	1.3e+04					
ASSET_ID_185349		-1020.0573	1.9e+04	-0.054	0.957	-3.83e
+04	3.63e+04					
ASSET_ID_185351		-2.764e+04	1.25e+04	-2.206	0.028	-5.22e
+04	-3062.198					
ASSET_ID_185352		1.834e+04	1.25e+04	1.465	0.143	-6210.
834	4.29e+04					
ASSET_ID_185353		-3887.9877	1.11e+04	-0.349	0.727	-2.57e
+04	1.8e+04					
ASSET_ID_185354		2.517e+04	2e+04	1.261	0.207	-1.4e
+04	6.43e+04					
ASSET_ID_185356		3.68e+04	1.71e+04	2.147	0.032	3174.

		reg_f				
799	7.04e+04					
ASSET_ID_185358		-3.043e+04	2.35e+04	-1.293	0.196	-7.66e
+04	1.57e+04					
ASSET_ID_185359		-5.318e+04	3.07e+04	-1.731	0.084	-1.13e
+05	7076.466					
ASSET_ID_185361		-9082.3055	2.06e+04	-0.442	0.659	-4.94e
+04	3.13e+04					
ASSET_ID_185364		4150.3013	1.59e+04	0.261	0.794	-2.71e
+04	3.54e+04					
ASSET_ID_185366		-3.395e+04	2.38e+04	-1.425	0.154	-8.07e
+04	1.28e+04					
ASSET_ID_185367		8123.6431	3.24e+04	0.251	0.802	-5.55e
+04	7.17e+04					
ASSET_ID_185368		2123.1003	1.91e+04	0.111	0.911	-3.53e
+04	3.95e+04					
ASSET_ID_185372		-1.292e+04	2.99e+04	-0.432	0.666	-7.16e
+04	4.58e+04					
ASSET_ID_185376		1.105e+04	1.67e+04	0.664	0.507	-2.16e
+04	4.37e+04					
ASSET_ID_185396		-2320.9331	3.25e+04	-0.071	0.943	-6.61e
+04	6.15e+04					
ASSET_ID_185400		8940.5733	3.97e+04	0.225	0.822	-6.89e
+04	8.68e+04					
ASSET_ID_185401		-3723.1871	1.74e+04	-0.214	0.831	-3.79e
+04	3.04e+04					
ASSET_ID_185405		-1812.0893	3.59e+04	-0.051	0.960	-7.22e
+04	6.85e+04					
ASSET_ID_185439		0.0009	0.001	1.170	0.242	-0.
001	0.003					
ASSET_ID_185440		-8450.9237	1.64e+04	-0.516	0.606	-4.06e
+04	2.37e+04					
ASSET_ID_185444		-1.384e+04	2.29e+04	-0.605	0.545	-5.87e
+04	3.1e+04					
ASSET_ID_185446		4.902e+04	2.37e+04	2.066	0.039	2470.
937	9.56e+04					
ASSET_ID_185449		3.946e+04	2.84e+04	1.391	0.165	-1.62e
+04	9.51e+04					
ASSET_ID_185452		2.444e+04	2.69e+04	0.908	0.364	-2.84e
+04	7.72e+04					
ASSET_ID_185458		-2.486e+04	1.67e+04	-1.489	0.137	-5.76e
+04	7892.675					
ASSET_ID_185459		1.492e+04	1.28e+04	1.162	0.246	-1.03e
+04	4.01e+04					
ASSET_ID_185461		8675.7001	1.96e+04	0.442	0.659	-2.98e
+04	4.72e+04					
ASSET_ID_185462		-1288.2247	2.13e+04	-0.061	0.952	-4.3e
+04	4.05e+04					
ASSET_ID_185463		-2.295e+04	2.56e+04	-0.895	0.371	-7.33e
+04	2.74e+04					
ASSET_ID_185467		3.193e+04	1.77e+04	1.803	0.072	-2807.
879	6.67e+04					
ASSET_ID_185473		2.283e+04	2.25e+04	1.013	0.311	-2.14e
+04	6.7e+04					
ASSET_ID_185478		4.873e+04	2.07e+04	2.357	0.019	8179.
902	8.93e+04					
ASSET_ID_185482		-4314.6419	1.69e+04	-0.256	0.798	-3.74e
+04	2.88e+04					
ASSET_ID_185484		2.684e+04	2.47e+04	1.087	0.277	-2.16e
+04	7.53e+04					
ASSET_ID_185496		2.022e+04	2.02e+04	1.001	0.317	-1.94e

		reg_f				
+04	5.99e+04					
ASSET_ID_185497		1.024e+04	2.24e+04	0.457	0.648	-3.37e
+04	5.42e+04					
ASSET_ID_185498		5.986e+04	3.12e+04	1.920	0.055	-1282.
264	1.21e+05					
ASSET_ID_185501		-2.282e+04	2e+04	-1.140	0.255	-6.21e
+04	1.64e+04					
ASSET_ID_185502		8093.0899	2.05e+04	0.394	0.693	-3.22e
+04	4.84e+04					
ASSET_ID_185503		-1493.6536	1.88e+04	-0.079	0.937	-3.84e
+04	3.54e+04					
ASSET_ID_185504		-3.037e+04	2.85e+04	-1.064	0.288	-8.64e
+04	2.56e+04					
ASSET_ID_185508		-3.271e+04	1.97e+04	-1.658	0.098	-7.14e
+04	5997.606					
ASSET_ID_185514		3.457e+04	1.99e+04	1.733	0.083	-4564.
641	7.37e+04					
ASSET_ID_185515		-522.8505	1.59e+04	-0.033	0.974	-3.17e
+04	3.06e+04					
ASSET_ID_185518		2.602e+04	1.59e+04	1.635	0.102	-5196.
580	5.72e+04					
ASSET_ID_185520		-5982.4569	1.4e+04	-0.428	0.669	-3.34e
+04	2.15e+04					
ASSET_ID_185523		-7778.0478	1.96e+04	-0.396	0.692	-4.63e
+04	3.07e+04					
ASSET_ID_185529		7127.6080	1.88e+04	0.379	0.705	-2.98e
+04	4.41e+04					
ASSET_ID_185530		3.999e+04	1.64e+04	2.433	0.015	7749.
991	7.22e+04					
ASSET_ID_185531		-1.556e+04	1.67e+04	-0.934	0.351	-4.83e
+04	1.71e+04					
ASSET_ID_185532		-6784.4886	2.1e+04	-0.323	0.747	-4.8e
+04	3.44e+04					
ASSET_ID_185533		-1.579e+04	1.37e+04	-1.156	0.248	-4.26e
+04	1.1e+04					
ASSET_ID_185534		-4.536e+04	2.6e+04	-1.742	0.082	-9.64e
+04	5712.750					
ASSET_ID_185540		1.156e+04	2.98e+04	0.388	0.698	-4.68e
+04	6.99e+04					
ASSET_ID_185541		-1193.4350	1.99e+04	-0.060	0.952	-4.02e
+04	3.79e+04					
ASSET_ID_185542		2.638e+04	3.57e+04	0.738	0.461	-4.37e
+04	9.65e+04					
ASSET_ID_185543		-1483.6927	3.14e+04	-0.047	0.962	-6.31e
+04	6.01e+04					
ASSET_ID_185545		0.0007	0.001	1.272	0.204	-0.
000	0.002					
ASSET_ID_185546		-1.003e+04	1.47e+04	-0.683	0.495	-3.88e
+04	1.88e+04					
ASSET_ID_185551		3.59e+04	3.9e+04	0.921	0.357	-4.06e
+04	1.12e+05					
ASSET_ID_185553		9928.0158	1.82e+04	0.546	0.585	-2.57e
+04	4.56e+04					
ASSET_ID_185554		4.294e+04	2.46e+04	1.747	0.081	-5280.
209	9.12e+04					
ASSET_ID_185557		-1790.1322	1.56e+04	-0.115	0.909	-3.24e
+04	2.88e+04					
ASSET_ID_185558		2.387e+04	2.43e+04	0.984	0.325	-2.37e
+04	7.15e+04					
ASSET_ID_185561		1435.1687	1.86e+04	0.077	0.939	-3.51e

		reg_f				
+04	3.8e+04					
ASSET_ID_185563		1.428e+04	1.99e+04	0.718	0.473	-2.47e
+04	5.33e+04					
ASSET_ID_185564		-5349.4069	3.19e+04	-0.168	0.867	-6.8e
+04	5.73e+04					
ASSET_ID_185566		-9618.7396	2.03e+04	-0.473	0.636	-4.95e
+04	3.03e+04					
ASSET_ID_185567		2035.2713	2.25e+04	0.090	0.928	-4.22e
+04	4.63e+04					
ASSET_ID_185569		-2.152e+04	1.7e+04	-1.268	0.205	-5.48e
+04	1.18e+04					
ASSET_ID_186982		1.237e+04	3.23e+04	0.383	0.702	-5.1e
+04	7.57e+04					
ASSET_ID_186984		-4794.2762	2.66e+04	-0.180	0.857	-5.7e
+04	4.74e+04					
ASSET_ID_186987		2879.7040	1.45e+04	0.199	0.842	-2.55e
+04	3.13e+04					
ASSET_ID_187261		-0.0011	0.001	-1.218	0.223	-0.
003	0.001					
ASSET_ID_187610		-1.41e+04	2.6e+04	-0.542	0.588	-6.52e
+04	3.7e+04					
ASSET_ID_187617		0.0003	0.000	0.636	0.525	-0.
001	0.001					
ASSET_ID_187742		-1.058e+04	1.53e+04	-0.693	0.489	-4.05e
+04	1.94e+04					
ASSET_ID_187743		8759.7881	1.84e+04	0.475	0.635	-2.74e
+04	4.49e+04					
ASSET_ID_187745		-6513.1364	1.4e+04	-0.466	0.641	-3.39e
+04	2.09e+04					
ASSET_ID_187753		-5269.8120	2.1e+04	-0.251	0.802	-4.64e
+04	3.59e+04					
ASSET_ID_187754		-1.002e+04	1.95e+04	-0.513	0.608	-4.83e
+04	2.83e+04					
ASSET_ID_187756		2.541e+04	1.98e+04	1.282	0.200	-1.35e
+04	6.43e+04					
ASSET_ID_187758		2.18e+04	1.85e+04	1.181	0.238	-1.44e
+04	5.8e+04					
ASSET_ID_188319		-1.608e+04	2.47e+04	-0.650	0.516	-6.46e
+04	3.25e+04					
ASSET_ID_188364		1.963e+04	2.39e+04	0.822	0.411	-2.72e
+04	6.65e+04					
ASSET_ID_188365		-3.102e+04	1.89e+04	-1.640	0.101	-6.81e
+04	6073.971					
ASSET_ID_188621		-2.84e+04	2.71e+04	-1.049	0.294	-8.15e
+04	2.47e+04					
ASSET_ID_190261		1.065e+04	2.57e+04	0.414	0.679	-3.98e
+04	6.11e+04					
ASSET_ID_190538		-1.242e+04	3.15e+04	-0.395	0.693	-7.41e
+04	4.93e+04					
ASSET_ID_190543		-9525.3499	2.44e+04	-0.391	0.696	-5.74e
+04	3.83e+04					
ASSET_ID_190544		6.834e+04	3.67e+04	1.864	0.063	-3587.
330	1.4e+05					
ASSET_ID_190552		1.863e+04	2.12e+04	0.877	0.381	-2.3e
+04	6.03e+04					
ASSET_ID_190556		-2.33e+04	2.97e+04	-0.786	0.432	-8.15e
+04	3.49e+04					
ASSET_ID_190717		-8825.3831	3.24e+04	-0.272	0.785	-7.24e
+04	5.47e+04					
ASSET_ID_190778		-3899.1567	1.95e+04	-0.200	0.841	-4.21e

		reg_f				
+04	3.43e+04					
ASSET_ID_191035		3.939e+04	1.63e+04	2.417	0.016	7417.
005	7.14e+04					
ASSET_ID_191051		-1.294e+04	1.93e+04	-0.669	0.503	-5.09e
+04	2.5e+04					
ASSET_ID_191055		5127.0054	1.35e+04	0.379	0.704	-2.14e
+04	3.16e+04					
ASSET_ID_191058		5.278e+04	1.39e+04	3.791	0.000	2.55e
+04	8.01e+04					
ASSET_ID_191069		1.333e+04	1.39e+04	0.956	0.339	-1.4e
+04	4.07e+04					
ASSET_ID_191071		5.9e+04	2.16e+04	2.731	0.006	1.66e
+04	1.01e+05					
ASSET_ID_191074		-3.064e+04	2.12e+04	-1.443	0.149	-7.23e
+04	1.1e+04					
ASSET_ID_191075		-7.332e+04	3.59e+04	-2.042	0.041	-1.44e
+05	-2872.829					
ASSET_ID_191078		3.869e+04	2.16e+04	1.789	0.074	-3720.
259	8.11e+04					
ASSET_ID_191081		-2.744e+04	3.74e+04	-0.734	0.463	-1.01e
+05	4.58e+04					
ASSET_ID_191087		-1868.0329	1.74e+04	-0.108	0.914	-3.59e
+04	3.22e+04					
ASSET_ID_191088		-2.363e+04	2.42e+04	-0.975	0.330	-7.12e
+04	2.39e+04					
ASSET_ID_191093		-2.397e+04	7.58e+04	-0.316	0.752	-1.73e
+05	1.25e+05					
ASSET_ID_191105		2.83e+04	3.08e+04	0.919	0.358	-3.21e
+04	8.87e+04					
ASSET_ID_191566		-6.293e+04	2.86e+04	-2.200	0.028	-1.19e
+05	-6820.885					
ASSET_ID_191745		-1.834e+04	2.81e+04	-0.653	0.514	-7.34e
+04	3.68e+04					
ASSET_ID_191784		2068.1013	2.53e+04	0.082	0.935	-4.76e
+04	5.17e+04					
ASSET_ID_191786		6676.2927	2.69e+04	0.248	0.804	-4.62e
+04	5.95e+04					
ASSET_ID_191828		-1.206e-12	9.61e-13	-1.255	0.210	-3.09e
-12	6.79e-13					
ASSET_ID_191897		9178.9230	3.56e+04	0.258	0.797	-6.07e
+04	7.91e+04					
ASSET_ID_191898		1.384e+04	2.71e+04	0.510	0.610	-3.94e
+04	6.71e+04					
ASSET_ID_191902		-3.63e+04	1.82e+04	-1.997	0.046	-7.2e
+04	-651.824					
ASSET_ID_192207		2744.2647	1.98e+04	0.139	0.890	-3.61e
+04	4.16e+04					
ASSET_ID_192657		-1.232e+04	1.41e+04	-0.874	0.382	-4e
+04	1.53e+04					
ASSET_ID_194382		-1.164e+04	2.42e+04	-0.481	0.631	-5.91e
+04	3.58e+04					
ASSET_ID_195075		-2289.3343	2.09e+04	-0.110	0.913	-4.32e
+04	3.87e+04					
ASSET_ID_195394		-9169.4609	2.19e+04	-0.419	0.676	-5.21e
+04	3.38e+04					
ASSET_ID_195400		3.101e+04	1.67e+04	1.860	0.063	-1699.
704	6.37e+04					
ASSET_ID_195409		7903.0300	2.52e+04	0.314	0.754	-4.15e
+04	5.73e+04					
ASSET_ID_195414		-1.387e+04	2.38e+04	-0.583	0.560	-6.05e

			reg_f			
+04	3.28e+04					
ASSET_ID_195417		-1.68e+04	3.22e+04	-0.522	0.602	-7.99e
+04	4.63e+04					
ASSET_ID_195419		1.711e+04	1.35e+04	1.264	0.206	-9435.
923	4.36e+04					
ASSET_ID_195420		-1.413e+04	3.27e+04	-0.432	0.666	-7.83e
+04	5.01e+04					
ASSET_ID_195421		-357.1121	1.3e+04	-0.028	0.978	-2.58e
+04	2.51e+04					
ASSET_ID_195422		-395.6640	2.36e+04	-0.017	0.987	-4.66e
+04	4.58e+04					
ASSET_ID_195423		1.245e+04	1.36e+04	0.916	0.360	-1.42e
+04	3.91e+04					
ASSET_ID_195424		1.258e+04	1.39e+04	0.903	0.367	-1.47e
+04	3.99e+04					
ASSET_ID_195425		-1.915e+04	1.86e+04	-1.029	0.304	-5.56e
+04	1.73e+04					
ASSET_ID_195426		1.197e+04	2.46e+04	0.488	0.626	-3.62e
+04	6.01e+04					
ASSET_ID_195428		-1.613e+04	2.04e+04	-0.792	0.428	-5.61e
+04	2.38e+04					
ASSET_ID_195430		1052.4276	2.11e+04	0.050	0.960	-4.02e
+04	4.24e+04					
ASSET_ID_195432		1.814e+04	2.43e+04	0.747	0.455	-2.95e
+04	6.58e+04					
ASSET_ID_195433		2.634e+04	2.49e+04	1.056	0.291	-2.26e
+04	7.53e+04					
ASSET_ID_195530		2.331e+04	3.37e+04	0.691	0.490	-4.28e
+04	8.95e+04					
ASSET_ID_195531		2.588e+04	1.79e+04	1.444	0.149	-9280.
115	6.1e+04					
ASSET_ID_195534		-3706.8334	3.16e+04	-0.117	0.907	-6.58e
+04	5.84e+04					
ASSET_ID_195535		-2.315e+04	2.51e+04	-0.921	0.357	-7.25e
+04	2.62e+04					
ASSET_ID_195537		-1.456e+04	3.35e+04	-0.435	0.664	-8.03e
+04	5.12e+04					
ASSET_ID_195538		5.803e+04	2.59e+04	2.245	0.025	7321.
671	1.09e+05					
ASSET_ID_196156		-1.858e+04	2.32e+04	-0.800	0.424	-6.41e
+04	2.7e+04					
ASSET_ID_196157		0	0	nan	nan	
0	0					
ASSET_ID_196158		-1.693e+04	3.06e+04	-0.554	0.580	-7.69e
+04	4.3e+04					
ASSET_ID_196368		0	0	nan	nan	
0	0					
ASSET_ID_196369		2299.1022	3.24e+04	0.071	0.943	-6.13e
+04	6.59e+04					
ASSET_ID_196672		-2.574e+04	3.62e+04	-0.711	0.477	-9.68e
+04	4.53e+04					
ASSET_ID_196752		2.668e+04	1.61e+04	1.655	0.098	-4935.
716	5.83e+04					
ASSET_ID_196759		-4663.3896	2.27e+04	-0.205	0.837	-4.92e
+04	3.99e+04					
ASSET_ID_196760		-5552.8359	1.99e+04	-0.279	0.781	-4.46e
+04	3.35e+04					
ASSET_ID_197303		2.088e+04	2.67e+04	0.781	0.435	-3.16e
+04	7.33e+04					
ASSET_ID_197323		7726.8793	1.46e+04	0.530	0.596	-2.09e

+04	3.63e+04					
ASSET_ID_197581		-7098.8292	3.73e+04	-0.190	0.849	-8.02e
+04	6.6e+04					
ASSET_ID_199277		1.553e+04	2.38e+04	0.652	0.515	-3.12e
+04	6.23e+04					
ASSET_ID_199833		0	0	nan	nan	
0	0					
ASSET_ID_199834		-3304.0269	2.41e+04	-0.137	0.891	-5.05e
+04	4.39e+04					
ASSET_ID_199835		-3.429e+04	1.92e+04	-1.784	0.075	-7.2e
+04	3416.326					
ASSET_ID_199909		4780.4205	2.79e+04	0.171	0.864	-5e
+04	5.95e+04					
ASSET_ID_199912		5409.7447	2.48e+04	0.218	0.827	-4.32e
+04	5.4e+04					
ASSET_ID_199914		4.939e+04	2.83e+04	1.744	0.081	-6154.
553	1.05e+05					
ASSET_ID_199915		3850.0542	2.2e+04	0.175	0.861	-3.94e
+04	4.71e+04					
ASSET_ID_200321		-1.435e+04	2.01e+04	-0.715	0.475	-5.38e
+04	2.5e+04					
ASSET_ID_200437		-1.257e+04	3.05e+04	-0.412	0.680	-7.24e
+04	4.72e+04					
ASSET_ID_202224		2.906e+04	3.07e+04	0.945	0.345	-3.13e
+04	8.94e+04					
DAY_PART_Daytime		1.104e+04	3678.577	3.000	0.003	3821.
527	1.83e+04					
DAY_PART_Early Fringe		9.196e+04	4531.881	20.292	0.000	8.31e
+04	1.01e+05					
DAY_PART_Early Morning		-2.832e+04	9068.032	-3.123	0.002	-4.61e
+04	-1.05e+04					
DAY_PART_Late Fringe		8.626e+04	4852.514	17.777	0.000	7.67e
+04	9.58e+04					
DAY_PART_Late Night		-1.67e+04	3894.575	-4.288	0.000	-2.43e
+04	-9060.683					
RELEASE_YEAR_1939-01-01 00:00:00		-1.232e+04	1.41e+04	-0.874	0.382	-4e
+04	1.53e+04					
RELEASE_YEAR_1947-01-01 00:00:00		-1.542e+04	1.58e+04	-0.976	0.329	-4.64e
+04	1.56e+04					
RELEASE_YEAR_1950-01-01 00:00:00		0	0	nan	nan	
0	0					
RELEASE_YEAR_1952-01-01 00:00:00		-3.429e+04	1.92e+04	-1.784	0.075	-7.2e
+04	3416.326					
RELEASE_YEAR_1953-01-01 00:00:00		-4.77e+04	2.21e+04	-2.155	0.031	-9.11e
+04	-4274.544					
RELEASE_YEAR_1954-01-01 00:00:00		-5255.7194	1.68e+04	-0.312	0.755	-3.83e
+04	2.77e+04					
RELEASE_YEAR_1956-01-01 00:00:00		3487.2530	1.8e+04	0.194	0.846	-3.18e
+04	3.88e+04					
RELEASE_YEAR_1958-01-01 00:00:00		1.298e+04	2.45e+04	0.530	0.596	-3.51e
+04	6.1e+04					
RELEASE_YEAR_1959-01-01 00:00:00		2.288e+04	1.85e+04	1.235	0.217	-1.35e
+04	5.92e+04					
RELEASE_YEAR_1960-01-01 00:00:00		-2.824e+04	1.97e+04	-1.435	0.152	-6.69e
+04	1.04e+04					
RELEASE_YEAR_1961-01-01 00:00:00		-3757.8531	1.76e+04	-0.213	0.831	-3.83e
+04	3.08e+04					
RELEASE_YEAR_1962-01-01 00:00:00		-6389.7390	1.31e+04	-0.487	0.626	-3.21e
+04	1.93e+04					
RELEASE_YEAR_1963-01-01 00:00:00		-1.456e+04	2.23e+04	-0.653	0.514	-5.83e

+04	2.92e+04							
	RELEASE_YEAR_1965-01-01 00:00:00	-3942.0044	1.77e+04	-0.223	0.824	-3.86e		
+04	3.07e+04							
	RELEASE_YEAR_1966-01-01 00:00:00	5.382e+04	1.79e+04	3.002	0.003	1.86e		
+04	8.9e+04							
	RELEASE_YEAR_1967-01-01 00:00:00	-8039.1725	1.34e+04	-0.602	0.547	-3.42e		
+04	1.82e+04							
	RELEASE_YEAR_1968-01-01 00:00:00	2.746e+04	1.55e+04	1.776	0.076	-2869.		
811	5.78e+04							
	RELEASE_YEAR_1970-01-01 00:00:00	-2.33e+04	1.53e+04	-1.520	0.129	-5.34e		
+04	6761.183							
	RELEASE_YEAR_1972-01-01 00:00:00	-3.039e+04	1.31e+04	-2.312	0.021	-5.62e		
+04	-4609.518							
	RELEASE_YEAR_1973-01-01 00:00:00	5379.1764	1.46e+04	0.369	0.712	-2.32e		
+04	3.4e+04							
	RELEASE_YEAR_1974-01-01 00:00:00	-1281.2972	1.21e+04	-0.106	0.916	-2.5e		
+04	2.25e+04							
	RELEASE_YEAR_1975-01-01 00:00:00	1233.4864	1.23e+04	0.100	0.920	-2.29e		
+04	2.54e+04							
	RELEASE_YEAR_1976-01-01 00:00:00	-3381.5164	1.43e+04	-0.237	0.813	-3.14e		
+04	2.46e+04							
	RELEASE_YEAR_1977-01-01 00:00:00	-1163.5988	1.31e+04	-0.089	0.929	-2.69e		
+04	2.45e+04							
	RELEASE_YEAR_1978-01-01 00:00:00	2170.4407	6383.735	0.340	0.734	-1.04e		
+04	1.47e+04							
	RELEASE_YEAR_1979-01-01 00:00:00	-2.671e+04	1.92e+04	-1.394	0.164	-6.43e		
+04	1.09e+04							
	RELEASE_YEAR_1980-01-01 00:00:00	8362.7556	1.03e+04	0.816	0.415	-1.17e		
+04	2.85e+04							
	RELEASE_YEAR_1981-01-01 00:00:00	4176.7282	9684.838	0.431	0.666	-1.48e		
+04	2.32e+04							
	RELEASE_YEAR_1982-01-01 00:00:00	-1.746e+04	1.19e+04	-1.473	0.141	-4.07e		
+04	5788.395							
	RELEASE_YEAR_1983-01-01 00:00:00	1.567e+04	9588.163	1.634	0.102	-3137.		
482	3.45e+04							
	RELEASE_YEAR_1984-01-01 00:00:00	1.338e+04	1.24e+04	1.078	0.281	-1.1e		
+04	3.77e+04							
	RELEASE_YEAR_1985-01-01 00:00:00	1.377e+04	8703.131	1.582	0.114	-3302.		
745	3.08e+04							
	RELEASE_YEAR_1986-01-01 00:00:00	1.387e+04	1.01e+04	1.375	0.169	-5913.		
731	3.37e+04							
	RELEASE_YEAR_1987-01-01 00:00:00	-8204.3176	1.2e+04	-0.686	0.493	-3.17e		
+04	1.53e+04							
	RELEASE_YEAR_1988-01-01 00:00:00	9090.5661	8356.617	1.088	0.277	-7301.		
409	2.55e+04							
	RELEASE_YEAR_1989-01-01 00:00:00	5856.8572	8043.955	0.728	0.467	-9921.		
813	2.16e+04							
	RELEASE_YEAR_1990-01-01 00:00:00	4814.1796	7375.236	0.653	0.514	-9652.		
761	1.93e+04							
	RELEASE_YEAR_1991-01-01 00:00:00	-1483.8003	9973.989	-0.149	0.882	-2.1e		
+04	1.81e+04							
	RELEASE_YEAR_1992-01-01 00:00:00	1.61e+04	1.3e+04	1.239	0.216	-9394.		
695	4.16e+04							
	RELEASE_YEAR_1993-01-01 00:00:00	8502.4640	7665.306	1.109	0.268	-6533.		
465	2.35e+04							
	RELEASE_YEAR_1994-01-01 00:00:00	-5417.1970	9534.477	-0.568	0.570	-2.41e		
+04	1.33e+04							
	RELEASE_YEAR_1995-01-01 00:00:00	1.856e+04	6927.989	2.679	0.007	4969.		
252	3.21e+04							
	RELEASE_YEAR_1996-01-01 00:00:00	8839.8275	7495.598	1.179	0.238	-5863.		

210	2.35e+04							
RELEASE_YEAR_1997-01-01 00:00:00	1.769e+04	1.07e+04	1.646	0.100	-3387.			
620	3.88e+04							
RELEASE_YEAR_1998-01-01 00:00:00	-1.144e+04	9415.491	-1.215	0.225	-2.99e			
+04	7031.738							
RELEASE_YEAR_1999-01-01 00:00:00	-1.313e+04	6486.520	-2.024	0.043	-2.59e			
+04	-407.610							
RELEASE_YEAR_2000-01-01 00:00:00	2624.4190	6190.559	0.424	0.672	-9518.			
711	1.48e+04							
RELEASE_YEAR_2001-01-01 00:00:00	8255.5384	7607.961	1.085	0.278	-6667.			
906	2.32e+04							
RELEASE_YEAR_2002-01-01 00:00:00	-6234.7811	6370.059	-0.979	0.328	-1.87e			
+04	6260.447							
RELEASE_YEAR_2003-01-01 00:00:00	-3706.3072	7946.668	-0.466	0.641	-1.93e			
+04	1.19e+04							
RELEASE_YEAR_2004-01-01 00:00:00	3210.5159	5902.747	0.544	0.587	-8368.			
054	1.48e+04							
RELEASE_YEAR_2005-01-01 00:00:00	1479.0525	7538.530	0.196	0.844	-1.33e			
+04	1.63e+04							
RELEASE_YEAR_2006-01-01 00:00:00	1.482e+04	5396.724	2.747	0.006	4236.			
880	2.54e+04							
RELEASE_YEAR_2007-01-01 00:00:00	-2376.5107	1.15e+04	-0.207	0.836	-2.49e			
+04	2.02e+04							
RELEASE_YEAR_2008-01-01 00:00:00	-7183.2575	8420.138	-0.853	0.394	-2.37e			
+04	9333.317							
RELEASE_YEAR_2009-01-01 00:00:00	-8763.3291	1.01e+04	-0.865	0.387	-2.86e			
+04	1.11e+04							
RELEASE_YEAR_2010-01-01 00:00:00	5015.5104	7538.468	0.665	0.506	-9771.			
619	1.98e+04							
RELEASE_YEAR_2011-01-01 00:00:00	1.201e+04	1.4e+04	0.859	0.390	-1.54e			
+04	3.94e+04							
MPAA_RATING_G		3.491e+04	1.68e+04	2.076	0.038	1931.		
997	6.79e+04							
MPAA_RATING_GP		-8450.9229	1.64e+04	-0.516	0.606	-4.06e		
+04	2.37e+04							
MPAA_RATING_M		7714.9012	1.69e+04	0.457	0.647	-2.54e		
+04	4.08e+04							
MPAA_RATING_NOT_RATED		3.022e+04	1.98e+04	1.530	0.126	-8534.		
640	6.9e+04							
MPAA_RATING_PG		3940.5869	6731.071	0.585	0.558	-9262.		
787	1.71e+04							
MPAA_RATING_PG-13		1.164e+04	6814.509	1.708	0.088	-1728.		
281	2.5e+04							
MPAA_RATING_R		4336.4422	6759.280	0.642	0.521	-8922.		
266	1.76e+04							
MPAA_RATING_UNRATED		3.739e+04	1.73e+04	2.161	0.031	3451.		
106	7.13e+04							
MPAA_RATING_X		-798.6279	1.21e+04	-0.066	0.948	-2.46e		
+04	2.3e+04							
TOMATO_IMAGE_fresh		-2352.7741	6210.078	-0.379	0.705	-1.45e		
+04	9828.644							
TOMATO_IMAGE_rotten		-4962.1529	6957.542	-0.713	0.476	-1.86e		
+04	8685.458							
<hr/>								
Omnibus:		77.304	Durbin-Watson:		2.019			
Prob(Omnibus):		0.000	Jarque-Bera (JB):		186.542			
Skew:		0.208	Prob(JB):		3.11e-41			
Kurtosis:		4.483	Cond. No.		1.99e+24			
<hr/>								

## Notes:

[1] Standard Errors assume that the covariance matrix of the errors is correctly specified.

[2] The smallest eigenvalue is 5.55e-30. This might indicate that there are strong multicollinearity problems or that the design matrix is singular.

In [60]:

```
def performance(X_train,y_train, X_test,y_test):
    lin_reg = sm.OLS(y_train,sm.add_constant(X_train)).fit()
    y_train_pred = lin_reg.predict(sm.add_constant(X_train))
    y_test_pred = lin_reg.predict(sm.add_constant(X_test))
    print('Train R2',metrics.r2_score(y_train,y_train_pred))
    print('Test R2',metrics.r2_score(y_test,y_test_pred))
    print('-'*50)
    print('Train MAPE:', metrics.mean_absolute_percentage_error(y_train,y_train_pred))
    print('Test MAPE:', metrics.mean_absolute_percentage_error(y_test,y_test_pred))
    print('Cross Val Score of MAPE:')
    scores = -1*cross_val_score(LinearRegression(),X_train,y_train,cv=5,
                                 scoring='neg_mean_absolute_percentage_error')
    bias = np.mean(scores)
    variance = np.std(scores,ddof=1)
    print('CV_scores:',scores)
    print('Bias :',bias)
    print('Variance:',variance)
```

In [61]:

```
performance(X_train,y_train, X_test,y_test)
```

```
Train R2 0.8114317320332267
Test R2 0.7822139431718541
-----
Train MAPE: 0.34185592731583486
Test MAPE: 0.40751128294176514
Cross Val Score of MAPE:
CV_scores: [ 66.10815042  74.46506484   0.5105791  153.93982944 108.01016555]
Bias : 80.60675787204949
Variance: 56.55089301308643
```

In [ ]: