The Android App Market on Google Play

Instructions

You work as a Data Analyst for a finance company which is closely eyeing the Android market before it launches its new app into Google Play. You have been asked to present an analysis of Google Play apps so that the team gets a comprehensive overview of different categories of apps, their ratings, and other metrics.

This will require you to use your data manipulation and data analysis skills.

Your three questions are as follows:

1. **Read the `apps.csv` file and clean the `Installs`column to convert it into integer data type.** Save your answer as a DataFrame `apps`. Going forward, you will do all your analysis on the `apps` DataFrame.

```
apps['Installs'] = apps['Installs'].astype('int64')
apps.info()
```

```
<class 'pandas.core.frame.DataFrame'>
RangeIndex: 9659 entries, 0 to 9658
Data columns (total 9 columns):
 #   Column        Non-Null Count  Dtype
---  ------        --------------  -----
 0   App           9659 non-null   object
 1   Category      9659 non-null   object
 2   Rating        8196 non-null   float64
 3   Reviews       9659 non-null   int64
 4   Size          8432 non-null   float64
 5   Installs      9659 non-null   int64
 6   Type          9659 non-null   object
 7   Price         9659 non-null   float64
 8   Last Updated  9659 non-null   object
dtypes: float64(3), int64(2), object(4)
memory usage: 679.3+ KB
```

2. **Find the number of apps in each category, the average price, and the average rating.** Save your answer as a DataFrame `app_category_info`. Your should rename the four columns as: `Category`, `Number of apps`, `Average price`, `Average rating`.

	Category	Number of apps	Average price	Average rating
0	ART_AND_DESIGN	64	0.093281	4.357377
1	AUTO_AND_VEHICLES	85	0.158471	4.190411
2	BEAUTY	53	0.000000	4.278571
3	BOOKS_AND_REFERENCE	222	0.539505	4.344970
4	BUSINESS	420	0.417357	4.098479
5	COMICS	56	0.000000	4.181481
6	COMMUNICATION	315	0.263937	4.121484
7	DATING	171	0.160468	3.970149
8	EDUCATION	119	0.150924	4.364407
9	ENTERTAINMENT	102	0.078235	4.135294

3. **Find the top 10 free `FINANCE` apps having the highest average sentiment score.** Save your answer as a DataFrame `top_10_user_feedback`. Your answer should have exactly 10 rows and two columns named: `App` and `Sentiment Score`, where the average `Sentiment Score` is sorted from **highest to lowest**.

	App	Sentiment Score
0	BBVA Spain	0.515086
1	Associated Credit Union Mobile	0.388093
2	BankMobile Vibe App	0.353455
3	A+ Mobile	0.329592
4	Current debit card and app made for teens	0.327258
5	BZWBK24 mobile	0.326883
6	Even - organize your money, get paid early	0.283929
7	Credit Karma	0.270052
8	Fortune City - A Finance App	0.266966
9	Branch	0.264230