

```

1  ## Problem Set
2
3  - List of all unique Prime_Genres(categories) in the dataset
4  - Category with highest number of apps
5  - Category with lowest number of apps
6  - Category with highest user rating
7  - App with highest downloads
8  - Category with highest average rating count
9  - Average user rating for free apps
10 - Average user rating for paid apps
11 - Category with highest average user rating for paid apps
12 - Most frequent Price point > 0
13 - Compare average user rating for paid vs free gaming apps

```

In [87]:

```

1  import pandas as pd
2  filepath="DataFiles/AppleStore.csv"
3
4  def readcsvdatafile(df):
5      data=pd.read_csv(filepath)
6      return data
7  readcsvdatafile(filepath)
8
9
10

```

7188	11060	1186384912	Derby Virtual Reality (VR) Racing	168774656	USD	0.00	18
7189	11074	1187128255	飞刀传奇-动 作武侠热血 江湖即时PK 传奇（登录 爆金装）	537462784	USD	0.99	0
7190	11077	1187279979	Add-Ons Studio for Minecraft	22999040	USD	2.99	97
7191	11079	1187282363	Plead the Fifth - The Game	27853824	USD	2.99	11

```
In [88]: 1 applestore=readcsvdatafile(filepath)
2         applestore.index = applestore['track_name']
3         applestore
4
```

```
Out[88]:
```

	Unnamed: 0	id	track_name	size_bytes	currency	price	rating_count_tot
PAC-MAN Premium	1	281656475	PAC-MAN Premium	100788224	USD	3.99	21292
Evernote - stay organized	2	281796108	Evernote - stay organized	158578688	USD	0.00	161065
WeatherBug - Local Weather, Radar, Maps, Alerts	3	281940292	WeatherBug - Local Weather, Radar, Maps, Alerts	100524032	USD	0.00	188583
eBay: Best App to Buy, Sell, Save! Online	4	282614216	eBay: Best App to Buy, Sell, Save! Online	128512000	USD	0.00	262241

```
In [89]: 1 #List of all unique Prime_Genres(categories) in the dataset
2
3 applestore.iloc[:, -5].unique() #if we give nunique it represents number of u
4
```

```
Out[89]: array(['Games', 'Productivity', 'Weather', 'Shopping', 'Reference',
'Finance', 'Music', 'Utilities', 'Travel', 'Social Networking',
'Sports', 'Business', 'Health & Fitness', 'Entertainment',
'Photo & Video', 'Navigation', 'Education', 'Lifestyle',
'Food & Drink', 'News', 'Book', 'Medical', 'Catalogs'],
dtype=object)
```

```
In [90]: 1 #Category with highest number of apps
2
3 #e=applestore.groupby(["prime_genre"]).size().reset_index(name='count')
4 applestore.drop_duplicates().prime_genre.value_counts().idxmax()
5
```

```
Out[90]: 'Games'
```

```
In [60]: 1 #Category with smaller number of apps
2         applestore.drop_duplicates().prime_genre.value_counts().idxmin()
```

```
Out[60]: 'Catalogs'
```

```
In [91]: 1 applestore=readcsvdatafile(filepath)
2         applestore.index = applestore['prime_genre']
3         applestore
```

prime_genre								
Games	1	281656475	PAC-MAN Premium	100788224	USD	3.99		21292
Productivity	2	281796108	Evernote - stay organized	158578688	USD	0.00		161065
Weather	3	281940292	WeatherBug - Local Weather, Radar, Maps, Alerts	100524032	USD	0.00		188583
Shopping	4	282614216	eBay: Best App to Buy, Sell, Save! Online Shop...	128512000	USD	0.00		262241
Reference	5	282935706	Bible	92774400	USD	0.00		985920

```
In [92]: 1 #Category with highest user rating
2         applestore[applestore["user_rating"]==5.0].index.unique()
3
```

```
Out[92]: Index(['Games', 'Business', 'Education', 'Photo & Video', 'Utilities',
               'Shopping', 'News', 'Health & Fitness', 'Productivity', 'Food & Drink',
               'Reference', 'Travel', 'Lifestyle', 'Weather', 'Music', 'Book',
               'Finance', 'Sports', 'Entertainment', 'Social Networking', 'Catalogs',
               'Medical', 'Navigation'],
              dtype='object', name='prime_genre')
```

```
In [93]: 1 # Average user rating for free apps
2
3
4         #count_free = appdata[appdata['price'] == 0].count().unique()[0]
5         applestore[applestore['price'] == 0]['user_rating'].mean()
6
7
```

```
Out[93]: 3.3767258382642997
```

```
In [94]: 1 # Average user rating for paid apps
2
3         applestore[applestore['price'] > 0]['user_rating'].mean()
4
```

```
Out[94]: 3.720948742438714
```

```
In [ ]: 1
```

