

```
In [1]: import pandas as pd
import numpy as np
import matplotlib.pyplot as plt
%matplotlib inline
```

```
In [2]: googleOne = pd.read_csv("./g/googleplaystore.csv")
googleOne.fillna(0.0,inplace = True)
appleOne = pd.read_csv("./a/AppleStore.csv")
```

```
In [3]: googleOne.head()
```

Out[3]:

|   | App   | Category       | Rating | Reviews | Size | Installs    | Type | Price | Content Rating |     |
|---|---|----------------|--------|---------|------|-------------|------|-------|----------------|-----|
| 0 | Photo Editor & Candy Camera & Grid & ScrapBook    | ART_AND_DESIGN | 4.1    | 159     | 19M  | 10,000+     | Free | 0     | Everyone       |     |
| 1 | Coloring book moana                               | ART_AND_DESIGN | 3.9    | 967     | 14M  | 500,000+    | Free | 0     | Everyone       | D€  |
| 2 | U Launcher Lite – FREE Live Cool Themes, Hide ... | ART_AND_DESIGN | 4.7    | 87510   | 8.7M | 5,000,000+  | Free | 0     | Everyone       |     |
| 3 | Sketch - Draw & Paint                             | ART_AND_DESIGN | 4.5    | 215644  | 25M  | 50,000,000+ | Free | 0     | Teen           |     |
| 4 | Pixel Draw - Number Art Coloring Book             | ART_AND_DESIGN | 4.3    | 967     | 2.8M | 100,000+    | Free | 0     | Everyone       | Des |

```
In [4]: appleOne.head()
```

Out[4]:

|   | Unnamed: 0 | id        | track_name  | size_bytes | currency | price | rating_count_tot | rating_count |
|---|------------|-----------|---|------------|----------|-------|------------------|--------------|
| 0 | 1          | 281656475 | PAC-MAN Premium                                   | 100788224  | USD      | 3.99  | 21292            |              |
| 1 | 2          | 281796108 | Evernote - stay organized                         | 158578688  | USD      | 0.00  | 161065           |              |
| 2 | 3          | 281940292 | WeatherBug - Local Weather, Radar, Maps, Alerts   | 100524032  | USD      | 0.00  | 188583           | 2            |
| 3 | 4          | 282614216 | eBay: Best App to Buy, Sell, Save! Online Shop... | 128512000  | USD      | 0.00  | 262241           |              |
| 4 | 5          | 282935706 | Bible   | 92774400   | USD      | 0.00  | 985920           | 5            |

```
In [5]: #Now try to streamline both datasets.  
#first change all the object values to numeric values in the google data set and rename them
```

```
In [6]: remove_google_columns = ['Genres', 'Last Updated', 'Current Ver', 'Android Ver', 'Installs', 'Type']  
remove_apple_columns = ['Unnamed: 0', 'currency', 'id', 'rating_count_ver', 'user_rating_ver', 'ver', 'sup_devices.num', 'ipadSc_urls.num', 'lang.num', 'vpp_lic']
```

```
In [7]: googleOne.drop(remove_google_columns, axis = 1, inplace = True)  
appleOne.drop(remove_apple_columns, axis = 1, inplace = True)
```

```
In [8]: googleOne.head()
```

Out[8]:

|   | App   | Category       | Rating | Reviews | Size | Price | Content Rating |
|---|---|----------------|--------|---------|------|-------|----------------|
| 0 | Photo Editor & Candy Camera & Grid & ScrapBook    | ART_AND_DESIGN | 4.1    | 159     | 19M  | 0     | Everyone       |
| 1 | Coloring book moana                               | ART_AND_DESIGN | 3.9    | 967     | 14M  | 0     | Everyone       |
| 2 | U Launcher Lite – FREE Live Cool Themes, Hide ... | ART_AND_DESIGN | 4.7    | 87510   | 8.7M | 0     | Everyone       |
| 3 | Sketch - Draw & Paint                             | ART_AND_DESIGN | 4.5    | 215644  | 25M  | 0     | Teen           |
| 4 | Pixel Draw - Number Art Coloring Book             | ART_AND_DESIGN | 4.3    | 967     | 2.8M | 0     | Everyone       |

```
In [9]: appleOne.head()
```

Out[9]:

|   | track_name  | size_bytes | price | rating_count_tot | user_rating | cont_rating | prime_genre  |
|---|---|------------|-------|------------------|-------------|-------------|--------------|
| 0 | PAC-MAN Premium                                   | 100788224  | 3.99  | 21292            | 4.0         | 4+          | Games        |
| 1 | Evernote - stay organized                         | 158578688  | 0.00  | 161065           | 4.0         | 4+          | Productivity |
| 2 | WeatherBug - Local Weather, Radar, Maps, Alerts   | 100524032  | 0.00  | 188583           | 3.5         | 4+          | Weather      |
| 3 | eBay: Best App to Buy, Sell, Save! Online Shop... | 128512000  | 0.00  | 262241           | 4.0         | 12+         | Shopping     |
| 4 | Bible   | 92774400   | 0.00  | 985920           | 4.5         | 4+          | Reference    |

```
In [10]: google_rename = {"App": "name", "Category": "category", "Rating": "rating",  
                          'Reviews': 'nreviews', 'Size': 'size', 'Price': 'price', 'Content Rating': 'content_rating'}  
apple_rename = {"track_name": "name", "prime_genre": "category", "user_rating": "rating", "cont_rating": "content_rating", "size_bytes": "size"}  
  
googleOne.rename(columns=google_rename, inplace = True)  
appleOne.rename(columns=apple_rename, inplace = True)
```

```
In [11]: googleOne.to_csv("main_google.csv", index = False)  
appleOne.to_csv("main_apple.csv", index = False)
```