

設置環境

```
import pandas as pd
pd.plotting.register_matplotlib_converters()
import matplotlib.pyplot as plt
%matplotlib inline
import seaborn as sns
print("Setup Complete")
```

Setup Complete

```
# Set up code checking
import os
if not os.path.exists("../input/ign_scores.csv"):
    os.symlink("../input/data-for-datavis/ign_scores.csv", "../input/ign_scores.csv")
from learntools.core import binder
binder.bind(globals())
from learntools.data_viz_to_coder.ex3 import *
print("Setup Complete")
```

Setup Complete

Csv 檔:

ign_scores.csv (4.43 kB) /kaggle/input/data-for-datavis/ign_scores.csv Copy 10 of 13 columns

Platform	Action	Action, Adventure	Adventure	Fighting	Platformer	Puzzle	RPG	Racing	Shooter
Dreamcast	6.8828571428571435	7.511111111111111	6.281818181818181	8.2	8.34	8.088888888888889	7.7	7.0424999999999995	7.6166666666666666
Game Boy Advance	6.373076923076922	7.507692307692309	6.057142857142857	6.226315789473684	6.970588235294118	6.5321428571428575	7.542857142857143	6.6571428571428575	6.4444444444444444
Game Boy Color	6.272727272727272	8.166666666666666	5.3076923076923075	4.5	6.352941176470588	6.583333333333333	7.285714285714286	5.897435897435898	4.5
GameCube	6.5325842696629195	7.608333333333333	6.753846153846154	7.422222222222222	6.665714285714286	6.133333333333333	7.890909090909091	6.852631578947367	6.981818181818181
Nintendo 3DS	6.670833333333333	7.481818181818181	7.414285714285713	6.614285714285714	7.50344827586207	7.999999999999999	7.719230769230767	6.9	7.033333333333333
Nintendo 64	6.649056603773586	8.25	7.0	5.6812499999999995	6.089655172413795	7.461538461538462	6.050000000000000	6.939622641509434	8.042857142857143
Nintendo DS	5.90360824742268	7.239999999999999	6.259803921568627	6.32	6.839999999999999	6.604615384615385	7.222619047619048	6.038636363636363	6.965217391304347
Nintendo DSi	6.827027027027027	8.5	6.090909090909091	7.5	7.25	6.810526315789474	7.166666666666667	6.563636363636363	6.5

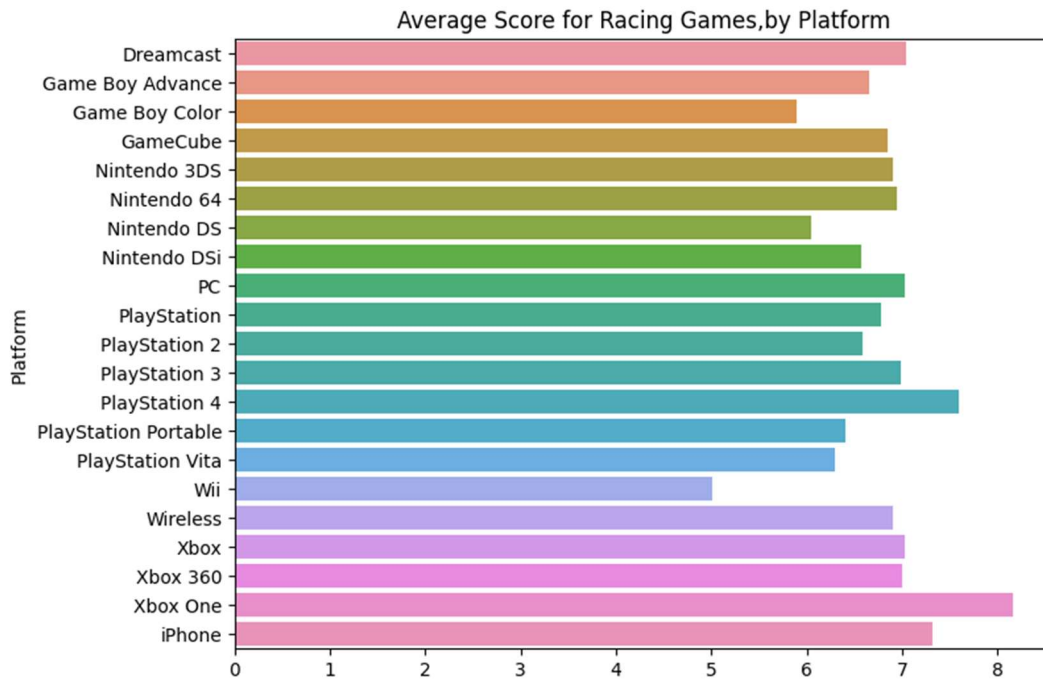
讀檔後，print 資料

```
# Print the data
ign_data # Your code here
```

	Action	Action, Adventure	Adventure	Fighting	Platformer	Puzzle	RPG	Racing	Shooter	Simulation	Sports	Strategy
Platform												
Dreamcast	6.882857	7.511111	6.281818	8.200000	8.340000	8.088889	7.700000	7.042500	7.616667	7.628571	7.272222	6.433333
Game Boy Advance	6.373077	7.507692	6.057143	6.226316	6.970588	6.532143	7.542857	6.657143	6.444444	6.928571	6.694444	7.175000
Game Boy Color	6.272727	8.166667	5.307692	4.500000	6.352941	6.583333	7.285714	5.897436	4.500000	5.900000	5.790698	7.400000
GameCube	6.532584	7.608333	6.753846	7.422222	6.665714	6.133333	7.890909	6.852632	6.981818	8.028571	7.481319	7.116667
Nintendo 3DS	6.670833	7.481818	7.414286	6.614286	7.503448	8.000000	7.719231	6.900000	7.033333	7.700000	6.388889	7.900000
Nintendo 64	6.649057	8.250000	7.000000	5.681250	6.889655	7.461538	6.050000	6.939623	8.042857	5.675000	6.967857	6.900000
Nintendo DS	5.903608	7.240000	6.259804	6.320000	6.840000	6.604615	7.222619	6.038636	6.965217	5.874359	5.936667	6.644737
Nintendo DSi	6.827027	8.500000	6.090909	7.500000	7.250000	6.810526	7.166667	6.563636	6.500000	5.195652	5.644444	6.566667
PC	6.805791	7.334746	7.136798	7.166667	7.410938	6.924706	7.759930	7.032418	7.084878	7.104889	6.902424	7.310207
PlayStation	6.016406	7.933333	6.313725	6.553731	6.579070	6.757895	7.910000	6.773387	6.424000	6.918182	6.751220	6.496875
PlayStation 2	6.467361	7.250000	6.315152	7.306349	7.068421	6.354545	7.473077	6.585065	6.641667	7.152632	7.197826	7.238889
PlayStation 3	6.853819	7.306154	6.820988	7.710938	7.735714	7.350000	7.436111	6.978571	7.219553	7.142857	7.485816	7.355172
PlayStation 4	7.550000	7.835294	7.388571	7.280000	8.390909	7.400000	7.944000	7.590000	7.804444	9.250000	7.430000	6.566667
PlayStation Portable	6.467797	7.000000	6.938095	6.822222	7.194737	6.726667	6.817778	6.401961	7.071053	6.761538	6.956790	6.550000
PlayStation Vita	7.173077	6.133333	8.057143	7.527273	8.568750	8.250000	7.337500	6.300000	7.660000	5.725000	7.130000	8.900000
Wii	6.262718	7.294643	6.234043	6.733333	7.054255	6.426984	7.410345	5.011667	6.479798	6.327027	5.966901	6.975000
Wireless	7.041699	7.312500	6.972414	6.740000	7.509091	7.360550	8.260000	6.898305	6.906780	7.802857	7.417699	7.542857
Xbox	6.819512	7.479032	6.821429	7.029630	7.303448	5.125000	8.277778	7.021591	7.485417	7.155556	7.884397	7.313333
Xbox 360	6.719048	7.137838	6.857353	7.552239	7.559574	7.141026	7.650000	6.996154	7.338153	7.325000	7.317857	7.112245
Xbox One	7.702857	7.566667	7.254545	7.171429	6.733333	8.100000	8.291667	8.163636	8.020000	7.733333	7.331818	8.500000
iPhone	6.865445	7.764286	7.745833	6.087500	7.471930	7.810784	7.185185	7.315789	6.995588	7.328571	7.152174	7.534921

畫 barplot(Which platform is best?)

```
plt.figure(figsize=(8,6))
# Bar chart showing average score for racing games by platform
sns.barplot(x=ign_data['Racing'],y=ign_data.index)
#Label for horizontal axis
plt.xlabel("")
plt.title("Average Score for Racing Games,by Platform")
# Check your answer
step_3.a.check()
```



Step3 PartB:根據這張長條圖，你認為 Wii 平台的賽車遊戲會獲得高分嗎？如果不是，那麼哪個遊戲平台似乎是最佳選擇？

根據數據，我們不應該指望 Wii 平台的賽車遊戲能獲得高分。事實上，Wii 平台的賽車遊戲平均評分低於其他任何平台。Xbox One 似乎是最佳選擇，因為它的平均評分最高。

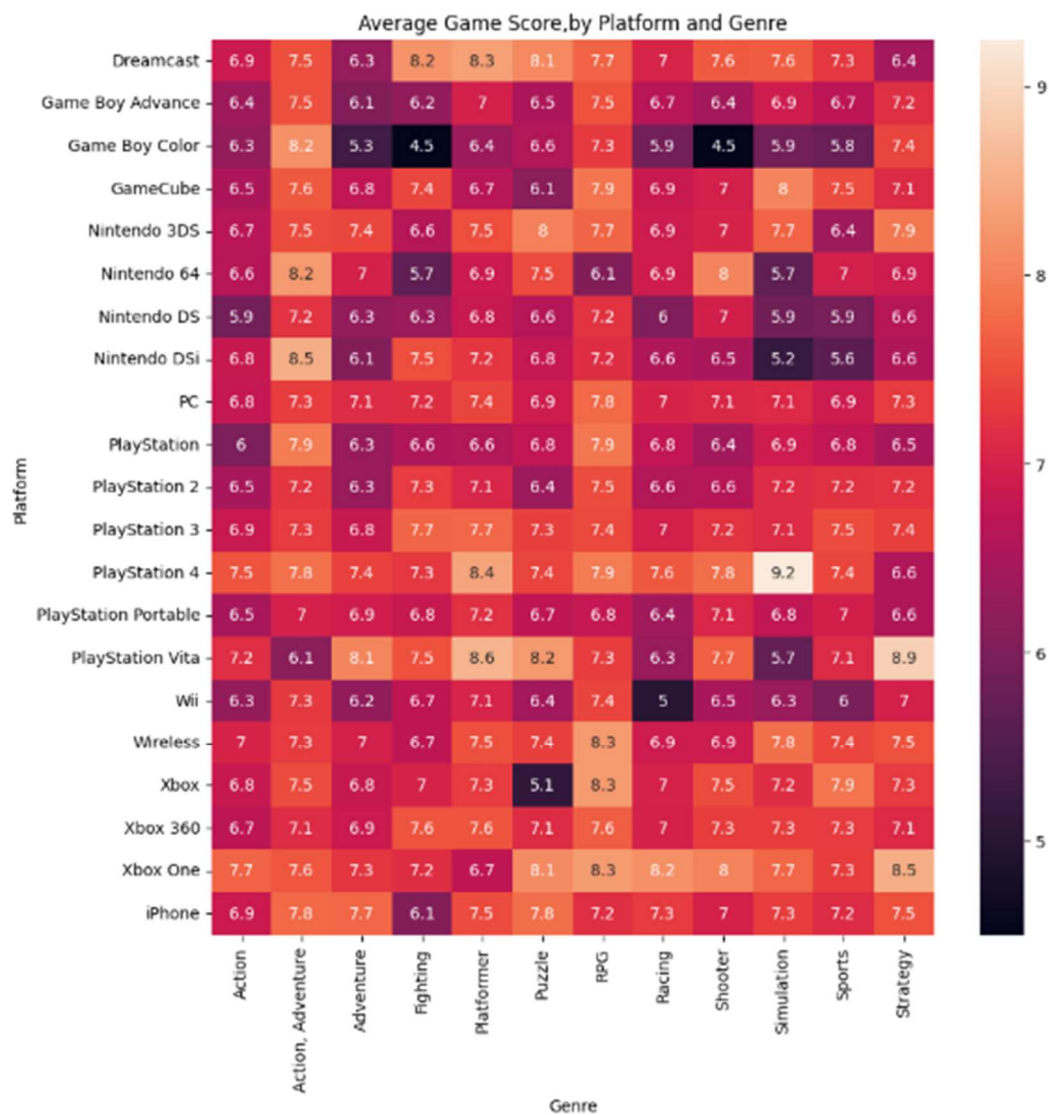
Heatmap:

遊戲類型和平台劃分的平均得分熱圖。

```

# Heatmap showing average game score by platform and genre
#Set width and height
plt.figure(figsize=(10,10))
#Heatmap showing average game score by platform and genre(annotaion:每個方格中顯示數值)
sns.heatmap(ign_data,annot=True)
#Add label for hoizontal
plt.xlabel("Genre")
#Add label for vertical
plt.ylabel("Platform")
plt.title("Average Game Score,by Platform and Genre")
# Check your answer
step_4.a.check()

```



哪種遊戲類型和平台組合的平均分數最高？哪一種組合的平均分數最低？

PlayStation 4 的模擬遊戲平均分數最高（9.2）。Game Boy Color 的射擊和格鬥遊戲平均得分最低（4.5）。