Materia:

Mineria de Datos e Inteligencia de Negocios

Practica:

Practica 4 Parcial 1

Integrantes:

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Profesora:

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Fecha:

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Mandato/Codigo

```python
from re import X
from sklearn import datasets
import pandas as pd
import matplotlib.pyplot as plt


# 1. Cargar el archivo 'netflix_title.csv'
data = pd.read_csv("./netflix_titles.csv")
```

Resultado

```
PROBLEMS    OUTPUT    DEBUG CONSOLE    TERMINAL

Backend MacOSX is interactive backend. Turning interactive mode on.
       show_id      type  type_id  ...    duration                                          listed_in                                description
0     81145628     Movie        1  ...      90 min           Children & Family Movies, Comedies  Before planning an awesome wedding for his gra...
1     80117401     Movie        1  ...      94 min                                Stand-Up Comedy  Jandino Asporaat riffs on the challenges of ra...
2     70234439   TV Show        2  ...    1 Season                                       Kids' TV  With the help of three human allies, the Autob...
3     80058654   TV Show        2  ...    1 Season                                       Kids' TV  When a prison ship crash unleashes hundreds of...
4     80125979     Movie        1  ...      99 min                                       Comedies  When nerdy high schooler Dani finally attracts...
...        ...       ...      ...  ...         ...                                            ...                                                ...
6229  80000063   TV Show        2  ...  13 Seasons  TV Action & Adventure, TV Comedies, TV Sci-Fi ...  This parody of first-person shooter games, mil...
6230  70286564   TV Show        2  ...   4 Seasons                                    TV Comedies  Marc Maron stars as Marc Maron, who interviews...
6231  80116008     Movie        1  ...      60 min                                         Movies  Nursery rhymes and original music for children...
6232  70281022   TV Show        2  ...   2 Seasons       British TV Shows, TV Comedies, TV Dramas  Set during the Russian Revolution, this comic ...
6233  70153404   TV Show        2  ...  10 Seasons               Classic & Cult TV, TV Comedies  This hit sitcom follows the merry misadventure...
```

2 Mandato/ Codigo

```
12
13    # 2. Visualizar los primeros 10 registros del conjunto de datos
14    print(data.head(10))
15
```

Resultado

```
[6234 rows x 13 columns]
      show_id    type  type_id ...  duration                            listed_in                               description
0    81145628   Movie        1 ...    90 min    Children & Family Movies, Comedies  Before planning an awesome wedding for his gra...
1    80117401   Movie        1 ...    94 min                      Stand-Up Comedy  Jandino Asporaat riffs on the challenges of ra...
2    70234439  TV Show       2 ...  1 Season                             Kids' TV  With the help of three human allies, the Autob...
3    80058654  TV Show       2 ...  1 Season                             Kids' TV  When a prison ship crash unleashes hundreds of...
4    80125979   Movie        1 ...    99 min                             Comedies  When nerdy high schooler Dani finally attracts...
5    80163890  TV Show       2 ...  1 Season  Crime TV Shows, International TV Shows, Spanis...  A young journalist is forced into a life of cr...
```

3 Mandato/Codigo

```
15
16    # 3. Visualizar los últimos 15 registros del conjunto de datos
17    print(data.tail(15))
18
19    # 4. Generar los estadísticos básicos
```

Resultado

```
      show_id    type  type_id ...   duration                                listed_in                               description
6219  80186475  TV Show       2 ...  2 Seasons                    Anime Series, Kids' TV  Ash and his Pikachu travel to the Alola region...
6220  70272742  TV Show       2 ...  2 Seasons                                  Kids' TV  In Justin's dreams, he and his imaginary frien...
6221  80067942  TV Show       2 ...  2 Seasons              International TV Shows, Reality TV  A new set of six men and women start their liv...
6222  70136122  TV Show       2 ...  8 Seasons                       TV Comedies, TV Dramas  A suburban mother starts selling marijuana to ...
6223  70204989  TV Show       2 ...  2 Seasons                 Anime Series, Crime TV Shows  On the surface, the Social Welfare Agency appe...
6224  70304979  TV Show       2 ...  5 Seasons                                Docuseries  This CNN original series has chef Anthony Bour...
6225  70153412  TV Show       2 ... 11 Seasons              Classic & Cult TV, TV Comedies  Frasier Crane is a snooty but lovable Seattle ...
6226  70243132  TV Show       2 ...  3 Seasons  International TV Shows, Spanish-Language TV Sh...  This irreverent sitcom featues Ludovico, Feder...
6227  80005756  TV Show       2 ...  2 Seasons                    Kids' TV, TV Comedies  Imagine your worst fears, then multiply them: ...
6228  80159925  TV Show       2 ...  2 Seasons                                  Kids' TV  A wacky rabbit and his gang of animal pals hav...
6229  80000063  TV Show       2 ... 13 Seasons  TV Action & Adventure, TV Comedies, TV Sci-Fi ...  This parody of first-person shooter games, mil...
6230  70286564  TV Show       2 ...  4 Seasons                                TV Comedies  Marc Maron stars as Marc Maron, who interviews...
6231  80116008   Movie        1 ...    60 min                                    Movies  Nursery rhymes and original music for children...
6232  70281022  TV Show       2 ...  2 Seasons        British TV Shows, TV Comedies, TV Dramas  Set during the Russian Revolution, this comic ...
6233  70153404  TV Show       2 ... 10 Seasons              Classic & Cult TV, TV Comedies  This hit sitcom follows the merry misadventure...

[15 rows x 13 columns]
```

4 Mandato/Codigo

```
19    # 4. Generar los estadísticos básicos
20    print(data.describe())
```

Resultado

```
[15 rows x 13 columns]
            show_id      type_id  release_year
count   6.234000e+03  6234.000000   6234.00000
mean    7.670368e+07     1.315849   2013.35932
std     1.094296e+07     0.464890      8.81162
min     2.477470e+05     1.000000   1925.00000
25%     8.003580e+07     1.000000   2013.00000
50%     8.016337e+07     1.000000   2016.00000
75%     8.024489e+07     2.000000   2018.00000
max     8.123573e+07     2.000000   2020.00000
[]
```

5 Mandato/Codigo

```
22    # 5. Completar todos los datos vacíos(na) con ceros(0)
23    data.fillna(0)
24
25
```

No muestra datos por que no hay celdas con null o 0

6 Mandto/Codigo

```python
# 6. Generar un gráfico de tipo barras que compare películas vs series desde el 2010 hasta el 2021. El resultado del grafico debe ser

data = data.loc[data['release_year'].isin(
    [*range(2010, 2022)]), ['type', 'release_year']].copy()
data.dropna(inplace=True)
data['release_year'] = data['release_year'].astype('int')

cross_tab_prop = pd.crosstab(index=data['release_year'],
                             columns=data['type'],
                             normalize="index")


cross_tab = pd.crosstab(index=data['release_year'],
                        columns=data['type'])


cross_tab.plot(kind='bar',
               figsize=(10, 5))


plt.legend(loc="upper left", ncol=2)
plt.xlabel("Release Year")
plt.ylabel("Conteo por año")
plt.show()
```

Resultado

index.py — Practica4 1erParcial

RUN AND DEBUG ···

index.py ×

index.py > ...

∨ RUN

Run and Debug

To customize Run and Debug create a
la...

Sh...

23 data.fillna(0)
24
25
26 # 6. Generar un gráfico de tipo barras que compare películas vs series desde el 2010 hasta el 2021. El resultado del grafico debe ser

Figure 1

∨ BREAKPOINTS

☐ Raised Exceptions
☑ Uncaught Exceptions
☐ User Uncaught Exceptions
● ☑ index.py   8
● ☑ index.py   12
● ☑ index.py   14
● ☑ index.py   23

[15 rows x 13 columns]

	show_id	type_id	release_year
count	6.234000e+03	6234.000000	6234.00000
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50%	8.016337e+07	1.000000	2016.00000
75%	8.024489e+07	2.000000	2018.00000
max	8.123573e+07	2.000000	2020.00000

es, Crime TV Shows   On the surface, the Social Welfare Agency appe...
Docuseries   This CNN original series has chef Anthony Bour...
lt TV, TV Comedies   Frasier Crane is a snooty but lovable Seattle ...
-Language TV Sh...   This irreverent sitcom features Ludovico, Feder...
s' TV, TV Comedies   Imagine your worst fears, then multiply them: ...
Kids' TV   A wacky rabbit and his gang of animal pals hav...
ies, TV Sci-Fi ...   This parody of first-person shooter games, mil...
TV Comedies   Marc Maron stars as Marc Maron, who interviews...
Movies   Nursery rhymes and original music for children...
omedies, TV Dramas   Set during the Russian Revolution, this comic ...
lt TV, TV Comedies   This hit sitcom follows the merry misadventure...

Python
Python De...

Python 3.9.7 ('base': conda)   ⊘ 0 ⚠ 0   Live Share   Ln 31, Col 1   Spaces: 4   UTF-8   LF   Python   Http Client