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```
from google.colab import drive
drive.mount('/content/drive')
```

Mounted at /content/drive

Importar librerías pandas y numpy

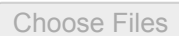
```
import pandas as pd
import numpy as np
```

Importar archivo netflix_titles.csv

```
from google.colab import files

uploaded = files.upload()

for fn in uploaded.keys():
    print('User uploaded file "{name}" with length {length} bytes'.format(
        name=fn, length=len(uploaded[fn])))
```

 netflix_titles.csv

- **netflix_titles.csv**(text/csv) - 3000491 bytes, last modified: 5/10/2022 - 100% done

Saving netflix_titles.csv to netflix_titles.csv
User uploaded file "netflix_titles.csv" with length 3000491 bytes

Cargar datos a DataFrame

```
df = pd.read_csv('netflix_titles.csv')
```

Mostrar los primeros 5 elementos del DataFrame

```
df.head(5)
```

| | show_id | type | title | director | cast | country | date_added | release_year |
|---|---------|---------|-------|-------------------|---|---------|-------------------|--------------|
| 0 | s1 | TV Show | 3% | NaN | João Miguel, Bianca Comparato, Michel Gomes, R... | Brazil | August 14, 2020 | 2020 |
| 1 | s2 | Movie | 7:19 | Jorge Michel Grau | Demián Bichir, Héctor Bonilla, Oscar Serrano, ... Tedd Chan. | Mexico | December 23, 2016 | 2016 |

Regresa el primer renglón del DataFrame

```
df["country"]
df["date_added"]
df["release_year"]

def the_first():
    return df[0:1]

the_first()
```

| | show_id | type | title | director | cast | country | date_added | release_year | r |
|---|---------|---------|-------|----------|---|---------|-----------------|--------------|---|
| 0 | s1 | TV Show | 3% | NaN | João Miguel, Bianca Comparato, Michel Gomes, R... | Brazil | August 14, 2020 | 2020 | |

Regresa el número de registros en el DataFrame

```
def row_number():
    return len(df.index)

row_number()

7787
```

Resultados dependiendo del año de lanzamiento

```
def released_year(year):
    return df.loc[df['release_year'] == year]
```

```
year_query = 2020
released_year(year_query)
```

| | show_id | type | title | director | cast | country | date_added | release_y |
|------|---------|---------|------------------------------------|----------|---|---------------|-------------------|-----------|
| 0 | s1 | TV Show | 3% | NaN | João Miguel, Bianca Comparato, Michel Gomes, R... | Brazil | August 14, 2020 | 2 |
| 24 | s25 | TV Show | SAINT SEIYA: Knights of the Zodiac | NaN | Bryson Baugus, Emily Neves, Blake Shepard, Pat... | Japan | January 23, 2020 | 2 |
| 26 | s27 | TV Show | (Un)Well | NaN | NaN | United States | August 12, 2020 | 2 |
| 27 | s28 | Movie | #Alive | Cho Il | Yoo Ah-in, Park Shin-hye | South Korea | September 8, 2020 | 2 |
| 29 | s30 | TV Show | #blackAF | NaN | Kenya Barris, Rashida Jones, Iman Benson, Genn... | United States | April 17, 2020 | 2 |
| ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7725 | s7726 | TV Show | You Cannot Hide | NaN | Blanca Soto, Eduardo Noriega, Iván | Mexico | October 1, 2020 | 2 |

Resultados filtrando por país


```
def origin_country(country):
    return df.loc[df['country'] == country]
```

```
country_query = 'Mexico'
origin_country(country_query)
```

| | show_id | type | title | director | cast | country | date_added | release_ |
|------|---------|---------|--|--------------------------|---|---------|-------------------|----------|
| 1 | s2 | Movie | 7:19 | Jorge Michel Grau | Demián Bichir, Héctor Bonilla, Oscar Serrano, ... | Mexico | December 23, 2016 | |
| 12 | s13 | TV Show | 1994 | Diego Enrique Osorno | NaN | Mexico | May 17, 2019 | |
| 292 | s293 | Movie | Acapulco La vida va | Alfonso Serrano Maturino | Patricio Castillo, Sergio Bustamante, Alejandr... | Mexico | June 3, 2017 | |
| 370 | s371 | Movie | Alan Saldaña: Mi vida de pobre | Raúl Campos, Jan Suter | Alan Saldaña | Mexico | August 4, 2017 | |
| 378 | s379 | Movie | Alex Fernández: The Best Comedian in the World | Alex Díaz | Alex Fernández | Mexico | January 23, 2020 | |
| ... | ... | ... | ... | ... | ... | ... | ... | ... |
| 7698 | s7699 | TV Show | Yankee | NaN | Pablo Lyle, Ana Layevska, Leonardo Daniel, Jav... | Mexico | June 14, 2019 | |
| 7725 | s7726 | TV Show | You Cannot Hide | NaN | Blanca Soto, Eduardo Noriega, Iván Sánchez, Ma... | Mexico | October 1, 2020 | |

DataFrame que solo incluya las columnas type, title, country y release_year

```
df1 = df[['type', 'title', 'country', 'release_year']].copy()
df1.head(5)
```

| | type | title | country | release_year |  |
|---|---------|-------|---------------|--------------|--|
| 0 | TV Show | 3% | Brazil | 2020 | |
| 1 | Movie | 7:19 | Mexico | 2016 | |
| 2 | Movie | 23:59 | Singapore | 2011 | |
| 3 | Movie | 9 | United States | 2009 | |
| 4 | Movie | 21 | United States | 2008 | |

Encontrar la cantidad de tipos distintos por país

```
def type_country(country):
    df_1 = df.loc[df['country'] == country]
    n = len(pd.unique(df_1['type']))
    return n
```

```
country_query = 'Mexico'
type_country(country_query)
```

2

Función para obtener el cuadrado de un número

```
def square(x):
    return (x*x)
```

```
square(5)
```

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Crea segundo DataFrame

```
df2 = pd.DataFrame({'A': [1, 2, 3, 5, 6], 'B': [10, 20, 30, 40, 50]})
df2
```

A

B



Función apply para usar la función en cada dato del DataFrame

```
1 2 3
```

```
df2.applymap(square)
```

| | A | B |
|---|----|------|
| 0 | 1 | 100 |
| 1 | 4 | 400 |
| 2 | 9 | 900 |
| 3 | 25 | 1600 |
| 4 | 36 | 2500 |

