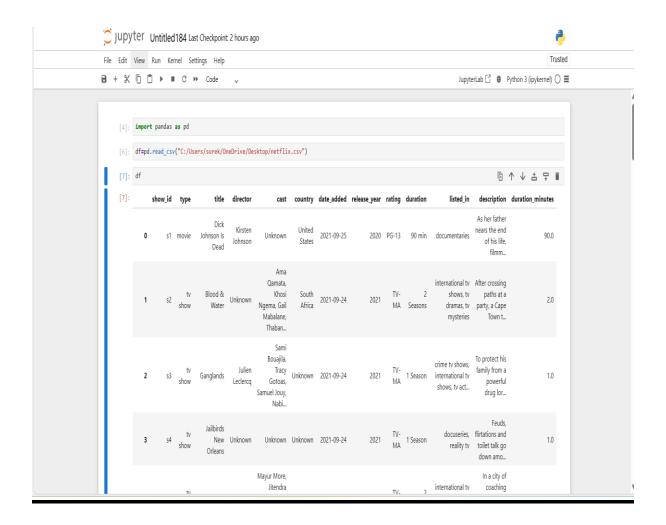
Step 1: Load the dataset





Step 2: Check missing values

```
[16]: print(df.isnull().sum())
      show_id
      type
                          0
      title
      director
      cast
      date added
      release_year
      rating
      duration
      listed in
      description
      duration minutes
      dtype: int64
[10]. df['director'] - df['director'] filln=('Unknown')
```

Step3:Handle missing/null values and Remove duplicates

```
[19]: df['director'] = df['director'].fillna('Unknown')
     df['cast'] = df['cast'].fillna('Unknown')
[20]: df.dropna(subset=['country'], inplace=True)
[21]: print("\nNull Values After Cleaning:")
     print(df.isnull().sum())
     Null Values After Cleaning:
     show id
     type
     title
     director
     cast
     country
     date added
     release_year 0
     rating
     duration
     listed in
     description
     duration minutes 3
     dtype: int64
[22]: print(df.duplicated().sum())
     0
```

Step 5: Standardize text/Clean column names

Step 6: Verify cleaned dataset

Step 7: Save cleaned dataset

:]:	df													
]:	show_id		type title		director	cast	country	date_added	release_year	rating	duration	listed_in	description	duration_minutes
	0	s1	movie	Dick Johnson Is Dead	Kirsten Johnson	Unknown	United States	2021-09-25	2020	PG-13	90 min	documentaries	As her father nears the end of his life, filmm	90
	1	s2	tv show	Blood & Water	Unknown	Ama Qamata, Khosi Ngema, Gail Mabalane, Thaban	South Africa	2021-09-24	2021	TV- MA	2 Seasons	international tv shows, tv dramas, tv mysteries	After crossing paths at a party, a Cape Town t	2
	2	s3	tv show	Ganglands	Julien Leclercq	Sami Bouajila, Tracy Gotoas, Samuel Jouy, Nabi	Unknown	2021-09-24	2021	TV- MA	1 Season	crime tv shows, international tv shows, tv act	To protect his family from a powerful drug lor	1
	3	s4	tv show	Jailbirds New Orleans	Unknown	Unknown	Unknown	2021-09-24	2021	TV- MA	1 Season	docuseries, reality tv	Feuds, flirtations and toilet talk go down amo	1
			tv			Mayur More, Jitendra				TV-	2	international tv	In a city of coaching	