



**MATRÍCULA: 1797222**

## INTRODUCCIÓN

La limpieza de datos es una parte fundamental en el proceso de minería de datos, ya que los datos utilizados en este proceso suelen ser obtenidos de diversas fuentes, y por lo tanto, pueden contener errores, ruido, datos incompletos, duplicados, entre otros problemas.

La limpieza de datos es el proceso de identificar y corregir o eliminar los datos incorrectos, incompletos, irrelevantes o redundantes en un conjunto de datos. El objetivo principal de la limpieza de datos es mejorar la calidad de los datos para garantizar que sean precisos, confiables y útiles en la toma de decisiones.

La limpieza de datos se puede dividir en varias etapas, incluyendo la identificación de errores y la eliminación de duplicados, la corrección de errores y la imputación de valores faltantes, y la normalización de datos. La limpieza de datos también puede incluir la transformación de datos para que puedan ser utilizados por algoritmos de minería de datos.

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Para esta práctica, se utilizó la herramienta de Kaggle para obtener los datos, en este caso se usó los datos de “Netflix Movies and TV Shows”, con el compilador PyCharm ejecutamos el código para leer el documento “netflix\_titles.csv” que es el que se va a realizar la limpieza.

## Datos sin limpiar:

show_id	type	title	director	cast	country	date_added	release_year
s1	Movie	Dick Johnson	Kirsten Johnson		United States	September 25	2020
s2	TV Show	Blood & Water		Ama Qamata,	South Africa	September 24	2021
s3	TV Show	Ganglands	Julien Leclerc	Sami Bouajila, Tracy Gotoas		September 24	2021
s4	TV Show	Jailbirds New Orleans				September 24	2021
s5	TV Show	Kota Factory		Mayur More,	India	September 24	2021
s6	TV Show	Midnight Mas	Mike Flanagan	Kate Siegel, Zach Gilford, Ha		September 24	2021
s7	Movie	My Little Pony	Robert Cullen	Vanessa Hudgens, Kimiko Gl		September 24	2021
s8	Movie	Sankofa	Haile Gerima	Kofi Ghanaba,	United States	September 24	1993
s9	TV Show	The Great Brit	Andy Devons	Mel Giedroyc,	United Kingdo	September 24	2021
s10	Movie	The Starling	Theodore Me	Melissa McCa	United States	September 24	2021
s11	TV Show	Vendetta: Truth, Lies and The Mafia				September 24	2021

rating	duration	listed_in	description						
PG-13	90 min	Documentarie	As her father nears the end of his life, filmmaker Kirsten Johnson stages his death in inventive and comical ways t						
TV-MA	2 Seasons	International	After crossing paths at a party, a Cape Town teen sets out to prove whether a private-school swimming star is he						
TV-MA	1 Season	Crime TV Sho	To protect his family from a powerful drug lord, skilled thief Mehdi and his expert team of robbers are pulled into						
TV-MA	1 Season	Docuseries, R	Feuds, flirtations and toilet talk go down among the incarcerated women at the Orleans Justice Center in New Or						
TV-MA	2 Seasons	International	In a city of coaching centers known to train India's finest collegiate minds, an earnest but unexceptional stud						
TV-MA	1 Season	TV Dramas, T	The arrival of a charismatic young priest brings glorious miracles, ominous mysteries and renewed religious fervor						
PG	91 min	Children & Fa	Equestria's divided. But a bright-eyed hero believes Earth Ponies, Pegasi and Unicorns should be pals and, hoc						
TV-MA	125 min	Dramas, Inde	On a photo shoot in Ghana, an American model slips back in time, becomes enslaved on a plantation and bears w						
TV-14	9 Seasons	British TV Sho	A talented batch of amateur bakers face off in a 10-week competition, whipping up their best dishes in the hopes						
PG-13	104 min	Comedies, Dr	A woman adjusting to life after a loss contends with a feisty bird that's taken over her garden and a husband						

## Datos limpios:

type	title	director	cast	country	release_year	rating	duration
Movie	SANKOFA	Haile Gerima	Kofi Ghanaba	United States	1993	TV-MA	125
Movie	THE STARLING	Theodore Melfino	Melissa McCarthy	United States	2021	PG-13	104
Movie	JE SUIS KARL	Christian Schwochow	Luna Wedler	Germany, Czech Republic	2021	TV-MA	127
Movie	JEANS	S. Shankar	Prashanth, Aishwarya	India	1998	TV-14	166
Movie	GROWN UPS	Dennis Dugan	Adam Sandler	United States	2010	PG-13	103
Movie	DARK SKIES	Scott Stewart	Keri Russell, Jovan	United States	2013	PG-13	97
Movie	PARANOIA	Robert Luketic	Liam Hemsworth	United States	2013	PG-13	106
Movie	BIRTH OF THE NATION	George Nolfi	Billy Magnussen	China, Canada	2017	PG-13	96
Movie	JAWS	Steven Spielberg	Roy Scheider	United States	1975	PG	124
Movie	JAWS 2	Jeannot Szwarc	Roy Scheider	United States	1978	PG	116

listed_in	description								
Dramas, Indie	On a photo shoot in Ghana, an American model slips back in time, becomes enslaved on a plantation and bears witness to the agony of her ancestors.								
Comedies, Drama	A woman adjusting to life after a loss contends with a feisty bird that's taken over her garden and a husband who's struggling to find a way to move forward.								
Dramas, International	After most of her family is murdered in a terrorist bombing, a young woman is unknowingly lured into joining the very group that killed them.								
Comedies, International	When the father of the man she loves insists that his twin sons marry twin sisters, a woman creates an alter ego that might be a bit too convincing.								
Comedies	Mourning the loss of their beloved junior high basketball coach, five middle-aged pals reunite at a lake house and rediscover the joys of being young again.								
Horror Movie	A family's idyllic suburban life shatters when an alien force invades their home, and as they struggle to convince others of the deadly threat, they must find a way to survive.								
Thrillers	Blackmailed by his company's CEO, a low-level employee finds himself forced to spy on the boss's rival and former mentor.								
Action & Adventure	A young Bruce Lee angers kung fu traditionalists by teaching outsiders, leading to a showdown with a Shaolin master in this film based on real life.								
Action & Adventure	When an insatiable great white shark terrorizes Amity Island, a police chief, an oceanographer and a grizzled shark hunter seek to destroy the beast.								
Dramas, Horror	Four years after the last deadly shark attacks, police chief Martin Brody fights to protect Amity Island from another killer great white.								
Action & Adventure	After the staff of a marine theme park try to capture a young great white shark, they discover its mother has invaded the enclosure and is out for blood.								

Como podemos observar, se eliminaron algunas columnas que no eran necesarias y se simplificaron otras, por lo tanto concluimos que el código cumplió su función y el resultado se guardó a nombre de "Netflix\_titles\_cleaned.csv"