CSCI 5408

Assignment 3
Problem 2

URL to GitLab Repository: https://git.cs.dal.ca/benny/csci-5408-w2022-b00899629-benny_daniel/-/tree/main/assignment-3
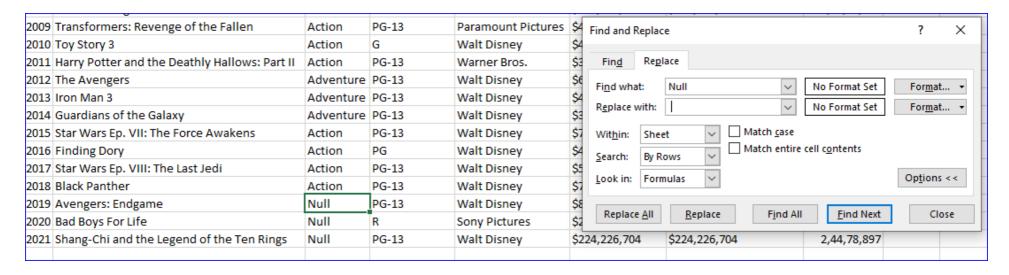
TASK 1 - Dataset Transformation - Summary
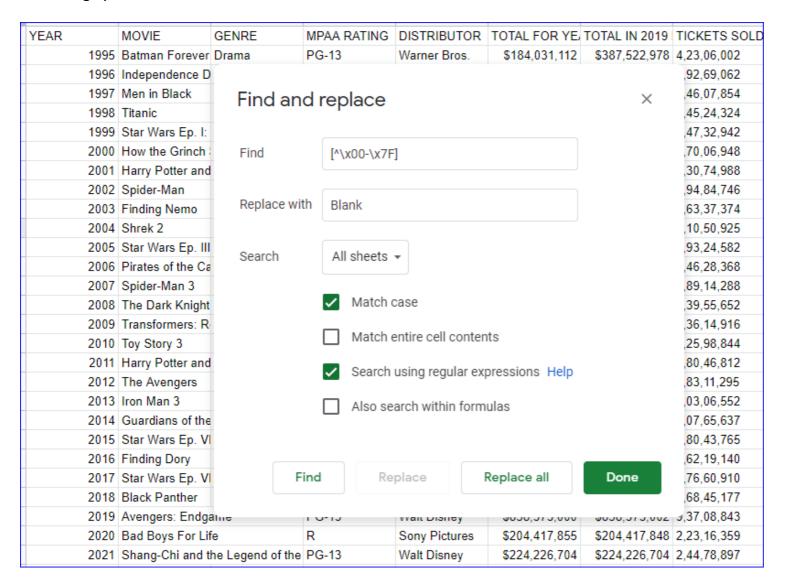
Converting Null Values to Blanks or Zeroes:

	A	B	C	D	E	F	G	H	I
	YEAR	MOVIE	GENRE	MPAA RATING	DISTRIBUTOR	TOTAL FOR YEAR	TOTAL IN 2019 DOLLARS	TICKETS SOLD	
	1995	Batman Forever	Drama	PG-13	Warner Bros.	$184,031,112			
	1996	Independence Day	Adventure	PG-13	20th Century Fox	$306,169,255			
	1997	Men in Black	Adventure	PG-13	Sony Pictures	$250,650,052			
	1998	Titanic	Adventure	PG-13	Paramount Pictures	$443,319,081			
	1999	Star Wars Ep. I: The Phantom Menace	Adventure	PG	20th Century Fox	$430,443,350			
	2000	How the Grinch Stole Christmas	Adventure	PG	Universal	$253,367,455			
	2001	Harry Potter and the Sorcerers Stone	Adventure	PG	Warner Bros.	$300,404,434			
	2002	Spider-Man	Adventure	PG-13	Sony Pictures	$403,706,375			
	2003	Finding Nemo	Adventure	G	Walt Disney	$339,714,367			
	2004	Shrek 2	Adventure	PG	Dreamworks SKG	$441,226,247			
	2005	Star Wars Ep. III: Revenge of the Sith	Action	PG-13	20th Century Fox	$380,270,577			
	2006	Pirates of the Caribbean: Dead Mans Chest	Action	PG-13	Walt Disney	$423,315,812			
	2007	Spider-Man 3	Adventure	PG-13	Sony Pictures	$336,530,303			
	2008	The Dark Knight	Adventure	PG-13	Warner Bros.	$531,001,578			
	2009	Transformers: Revenge of the Fallen	Action	PG-13	Paramount Pictures	$402,111,870			
	2010	Toy Story 3	Action	G	Walt Disney	$415,004,880			
	2011	Harry Potter and the Deathly Hallows: Part II	Action	PG-13	Warner Bros.	$381,011,219	$440,108,798	4,80,40,812	
	2012	The Avengers	Adventure	PG-13	Walt Disney	$623,357,910	$717,331,462	7,83,11,295	

Go To Special

Select
- ○ Notes
- ○ Constants
- ○ Formulas
  - ☑ Numbers
  - ☑ Text
  - ☑ Logicals
  - ☑ Errors
- ⦿ Blanks
- ○ Current region
- ○ Current array
- ○ Objects
- ○ Row differences
- ○ Column differences
- ○ Precedents
- ○ Dependents
  - ⦿ Direct only
  - ○ All levels
- ○ Last cell
- ○ Visible cells only
- ○ Conditional formats
- ○ Data validation
  - ⦿ All
  - ○ Same

[OK] [Cancel]

2014	Guardians of the Galaxy	Adventure	PG-13	Walt Disney	$333,055,258	$373,413,235	4,07,65,637
2015	Star Wars Ep. VII: The Force Awakens	Action	PG-13	Walt Disney	$742,208,942	$806,480,887	8,80,43,765
2016	Finding Dory	Action	PG	Walt Disney	$486,295,561	$514,967,322	5,62,19,140
2017	Star Wars Ep. VIII: The Last Jedi	Action	PG-13	Walt Disney	$517,218,368	$528,173,936	5,76,60,910
2018	Black Panther	Action	PG-13	Walt Disney	$700,059,566	$703,901,821	7,68,45,177
2019	Avengers: Endgame	Null	PG-13	Walt Disney	$858,373,000	$858,373,002	9,37,08,843
2020	Bad Boys For Life	Null	R	Sony Pictures	$204,417,855	$204,417,848	2,23,16,359
2021	Shang-Chi and the Legend of the Ten Rings	Null	PG-13	Walt Disney	$224,226,704	$224,226,704	2,44,78,897

Replace "Null" with ""

2009	Transformers: Revenge of the Fallen	Action	PG-13	Paramount Pictures	$4
2010	Toy Story 3	Action	G	Walt Disney	$4
2011	Harry Potter and the Deathly Hallows: Part II	Action	PG-13	Warner Bros.	$3
2012	The Avengers	Adventure	PG-13	Walt Disney	$6
2013	Iron Man 3	Adventure	PG-13	Walt Disney	$4
2014	Guardians of the Galaxy	Adventure	PG-13	Walt Disney	$3
2015	Star Wars Ep. VII: The Force Awakens	Action	PG-13	Walt Disney	$7
2016	Finding Dory	Action	PG	Walt Disney	$4
2017	Star Wars Ep. VIII: The Last Jedi	Action	PG-13	Walt Disney	$5
2018	Black Panther	Action	PG-13	Walt Disney	$7
2019	Avengers: Endgame	Null	PG-13	Walt Disney	$8
2020	Bad Boys For Life	Null	R	Sony Pictures	$2
2021	Shang-Chi and the Legend of the Ten Rings	Null	PG-13	Walt Disney	$224,226,704	$224,226,704	2,44,78,897

Find and Replace — ? ✕

Find | Replace

Find what: Null — No Format Set — Format... ▾
Replace with: | — No Format Set — Format... ▾

Within: Sheet — ☐ Match case
Search: By Rows — ☐ Match entire cell contents
Look in: Formulas — Options <<

Replace All | Replace | Find All | Find Next | Close

Removing Special Characters:

YEAR	MOVIE	GENRE	MPAA RATING	DISTRIBUTOR	TOTAL FOR YE	TOTAL IN 2019	TICKETS SOLD
1995	Batman Forever	Drama	PG-13	Warner Bros.	$184,031,112	$387,522,978	4,23,06,002
1996	Independence D						,92,69,062
1997	Men in Black						,46,07,854
1998	Titanic						,45,24,324
1999	Star Wars Ep. I:						,47,32,942
2000	How the Grinch						,70,06,948
2001	Harry Potter and						,30,74,988
2002	Spider-Man						,94,84,746
2003	Finding Nemo						,63,37,374
2004	Shrek 2						,10,50,925
2005	Star Wars Ep. III						,93,24,582
2006	Pirates of the Ca						,46,28,368
2007	Spider-Man 3						,89,14,288
2008	The Dark Knight						,39,55,652
2009	Transformers: R						,36,14,916
2010	Toy Story 3						,25,98,844
2011	Harry Potter and						,80,46,812
2012	The Avengers						,83,11,295
2013	Iron Man 3						,03,06,552
2014	Guardians of the						,07,65,637
2015	Star Wars Ep. VI						,80,43,765
2016	Finding Dory						,62,19,140
2017	Star Wars Ep. VI						,76,60,910
2018	Black Panther						,68,45,177
2019	Avengers: Endgame		PG-13	Walt Disney	$858,373,000	$858,373,002	9,37,08,843
2020	Bad Boys For Life		R	Sony Pictures	$204,417,855	$204,417,848	2,23,16,359
2021	Shang-Chi and the Legend of the		PG-13	Walt Disney	$224,226,704	$224,226,704	2,44,78,897

Find and replace   ✕

Find	[^\x00-\x7F]
Replace with	Blank
Search	All sheets ▾

☑ Match case

☐ Match entire cell contents

☑ Search using regular expressions Help

☐ Also search within formulas

[Find] [Replace] [Replace all] [**Done**]

References

[1] "Two Phase Locking (2PL)", *Medium*, 2022. [Online]. Available: https://medium.com/@vikas.singh_67409/two-phase-locking-2pl-696c49a66a79. [Accessed: 23- Feb- 2022].

[2] "How does the 2PL (Two-Phase Locking) algorithm work - Vlad Mihalcea", *Vlad Mihalcea*, 2022. [Online]. Available: https://vladmihalcea.com/2pl-two-phase-locking/. [Accessed: 22- Feb- 2022].