NETFLIX DASHBOARD REPORT

THAPAR INSTITUTE
OF ENGINEERING & TECHNOLOGY
(Deemed to be University)
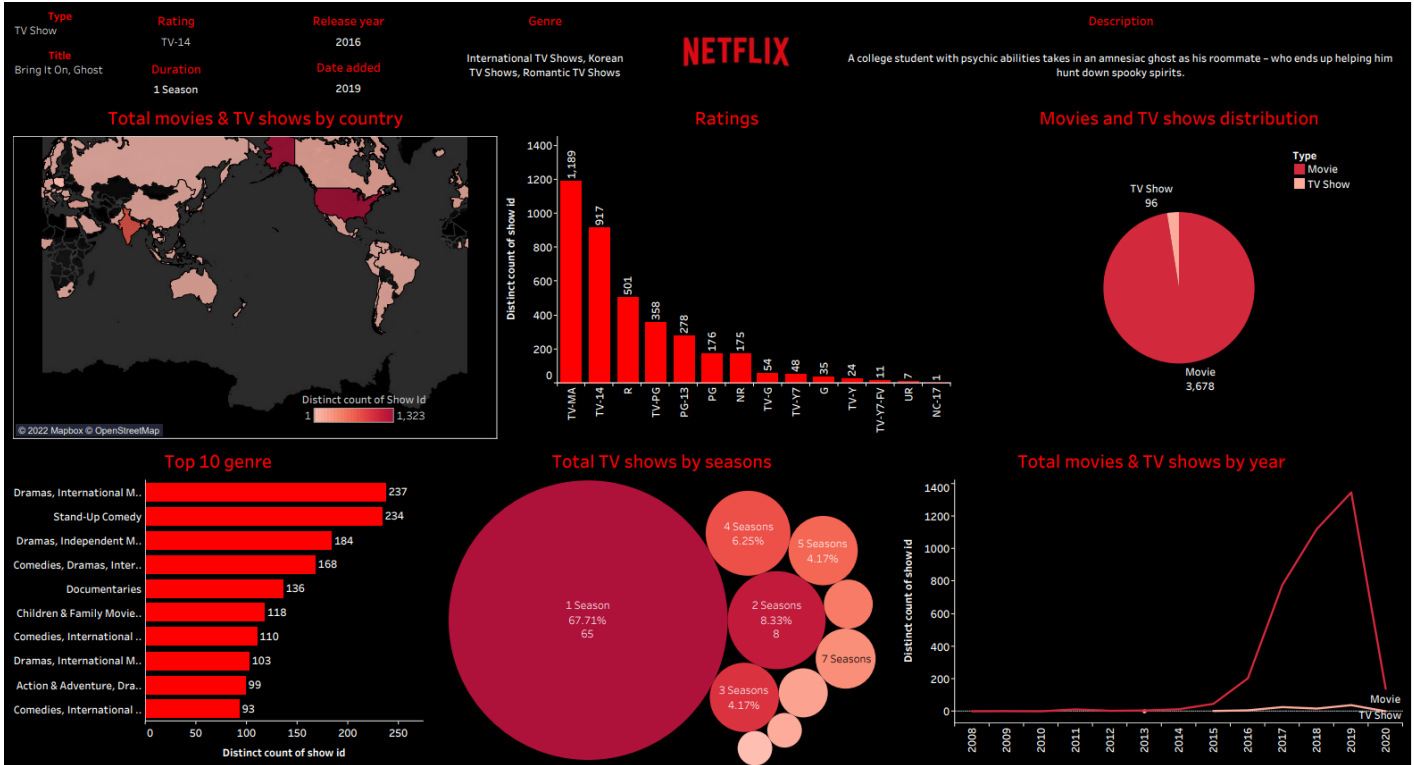
Submitted By:

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Roll no.: 102003410

Submitted To:

Dr. Sharad Saxena

July 2022 – December 2022

1. Dashboard:

2. Dataset used:

This is the dataset that will be cleaned which contains details of all the movies and TV shows on Netflix's database with 6234 entries.

3. Data cleaning:

Steps followed for cleaning the data ->

```r
#DATA CLEANING
for(i in 1:10)
  df[i,"release_year"]<--199

df[df==""]<-NA

df %>%
  select(release_year) %>%
  slice(1:10)

df[1,"release_year"]<-2019

t<-c(2,4,6)
df[t,"release_year"]<-2016

df[3,"release_year"]<-2013

t1<-c(5,8,9)
df[t1,"release_year"]<-2017

t2<-c(7,10)
df[t2,"release_year"]<-2014

df<-na.omit(df)
```

Outputs:

```
Console   Terminal ×   Background Jobs ×
  R 4.2.1 · C:/Users/HP/Downloads/netflix_titles.csv (1)/
> df<-read.csv("netflix.csv")
> df[df == ""] <- NA
> df
     show_id   type                                              title
1   81145628  Movie            Norm of the North: King Sized Adventure
2   80117401  Movie                          Jandino: Whatever it Takes
3   70234439  TV Show                                   Transformers Prime
4   80058654  TV Show                    Transformers: Robots in Disguise
5   80125979  Movie                                         #realityhigh
6   80163890  TV Show                                              Apaches
7   70304989  Movie                                             Automata
8   80164077  Movie              Fabrizio Copano: Solo pienso en mi
9   80117902  TV Show                                         Fire Chasers
10  70304990  Movie                                          Good People
11  80169755  Movie             Joaquín Reyes: Una y no más
12  70299204  Movie                         Kidnapping Mr. Heineken
13  80182480  Movie                       Krish Trish and Baltiboy
14  80182483  Movie          Krish Trish and Baltiboy: Battle of Wits
15  80182596  Movie     Krish Trish and Baltiboy: Best Friends Forever
16  80182482  Movie          Krish Trish and Baltiboy: Comics of India
17  80182597  Movie Krish Trish and Baltiboy: Oversmartness Never Pays
18  80182481  Movie                 Krish Trish and Baltiboy: Part II
19  80182621  Movie         Krish Trish and Baltiboy: The Greatest Trick
20  80057969  Movie                                                 Love
21  80060297  Movie                                    Manhattan Romance
22  80046728  Movie                                          Moonwalkers
23  80046727  Movie                                        Rolling Papers
24  70304988  Movie                                     Stonehearst Asylum
25  80057700  Movie                                           The Runner
26  80045922  Movie                                              6 Years
27  80244601  TV Show                                      Castle of Stars
28  80203094  Movie                                          City of Joy
29  80190843  TV Show                                       First and Last
30  70241607  Movie                                            Laddaland
31  80988892  Movie                                             Next Gen
32  80239639  Movie                            Sierra Burgess Is A Loser
33  80159586  Movie         The Most Assassinated Woman in the World
34  80152447  Movie                                       Cézanne et moi
35  80221550  TV Show                           Archibald's Next Big Thing
36  81154455  Movie                                            Article 15
37  81113928  Movie                               Care of Kancharapalem
38  81052275  Movie                             Ee Nagaraniki Emaindi
39  81132437  Movie                                   Kill Me If You Dare
40  80178151  TV Show                                             The Spy
41  80058026  Movie                                        Hell and Back
42  70303496  Movie                                                   PK
43  80162141  Movie                                            Hard Tide
```

```
 [2] NA

 [3] NA

 [4] NA

 [5] "Fernando Lebrija"

 [6] NA

 [7] "Gabe Ibáñez"

 [8] "Rodrigo Toro, Francisco Schultz"

 [9] NA

[10] "Henrik Ruben Genz"

[11] "José Miguel Contreras"

[12] "Daniel Alfredson"

[13] NA

[14] "Munjal Shroff, Tilak Shetty"

[15] "Munjal Shroff, Tilak Shetty"

[16] "Tilak Shetty"

[17] "Tilak Shetty"

[18] NA

[19] "Munjal Shroff, Tilak Shetty"

[20] "Gaspar Noé"

[21] "Tom O'Brien"

[22] "Antoine Bardou-Jacquet"

[23] "Mitch Dickman"

[24] "Brad Anderson"

[25] "Austin Stark"
```

```
> select(df,date_added:rating)
           date_added release_year    rating
1     September 9, 2019         -199     TV-PG
2     September 9, 2016         -199     TV-MA
3     September 8, 2018         -199 TV-Y7-FV
4     September 8, 2018         -199     TV-Y7
5     September 8, 2017         -199     TV-14
6     September 8, 2017         -199     TV-MA
7     September 8, 2017         -199         R
8     September 8, 2017         -199     TV-MA
9     September 8, 2017         -199     TV-MA
10    September 8, 2017         -199         R
11    September 8, 2017         2017     TV-MA
12    September 8, 2017         2015         R
13    September 8, 2017         2009     TV-Y7
14    September 8, 2017         2013     TV-Y7
15    September 8, 2017         2016      TV-Y
16    September 8, 2017         2012     TV-Y7
17    September 8, 2017         2017     TV-Y7
18    September 8, 2017         2010     TV-Y7
19    September 8, 2017         2013     TV-Y7
20    September 8, 2017         2015        NR
21    September 8, 2017         2014     TV-14
22    September 8, 2017         2015         R
23    September 8, 2017         2015     TV-MA
24    September 8, 2017         2014     PG-13
25    September 8, 2017         2015         R
26    September 8, 2015         2015        NR
27    September 7, 2018         2015     TV-14
28    September 7, 2018         2018     TV-MA
29    September 7, 2018         2018     TV-MA
30    September 7, 2018         2011     TV-MA
```

```
> df[3,"release_year"]<-2013
> df %>%
+   select(release_year) %>%
+   slice(1:10)
   release_year
1          2019
2          2016
3          2013
4          2016
5          2017
6          2016
7          2014
8          2017
9          2017
10         2014
>
```

4. Splitting of datasets:

After cleaning the dataset has been split into 3 smaller datasets using show_id and title as the primary key using the following codes ->

```
#DATA SPLITTING
split_1<-select(df,show_id,type,title,director,cast,country)
split_2<-select(df,show_id,title,date_added,release_year,rating)
split_3<-select(df,show_id,title,duration,listed_in,description)

write.csv(split_1,"C:\\Users\\HP\\Downloads\\netflix_titles.csv (1)\\SPLIT 1.csv")
write.csv(split_2,"C:\\Users\\HP\\Downloads\\netflix_titles.csv (1)\\SPLIT 2.csv")
write.csv(split_3,"C:\\Users\\HP\\Downloads\\netflix_titles.csv (1)\\SPLIT 3.csv")
```

Tables:

	show_id	type	title	director	cast	country
1	8.1E+07	Movie	Norm of the North: K	Richard Finn,	Alan Mar	United States, India, South Korea, China
5	8E+07	Movie	#realityhigh	Fernando Leb	Nesta Cod	United States
7	7E+07	Movie	Automata	Gabe IbÃ¡Ã±e	Antonio E	Bulgaria, United States, Spain, Canada
8	8E+07	Movie	Fabrizio Copano: Sol	Rodrigo Toro	Fabrizio (	Chile
10	7E+07	Movie	Good People	Henrik Ruben	James Fra	United States, United Kingdom, Denmark, Sweden
12	7E+07	Movie	Kidnapping Mr. Heir	Daniel Alfred	Jim Sturge	Netherlands, Belgium, United Kingdom, United States
20	8E+07	Movie	Love	Gaspar NoÃ©	Karl Glus	France, Belgium
21	8E+07	Movie	Manhattan Romance	Tom O'Brien	Tom O'Br	United States
22	8E+07	Movie	Moonwalkers	Antoine Bard	Ron Perln	France, Belgium
24	7E+07	Movie	Stonehearst Asylum	Brad Anderso	Kate Beck	United States
25	8E+07	Movie	The Runner	Austin Stark	Nicolas C	United States
26	8E+07	Movie	6 Years	Hannah Fidel	Taissa Fa	United States
30	7E+07	Movie	Laddaland	Sopon Sukda	Saharat S	Thailand
31	8.1E+07	Movie	Next Gen	Kevin R. Adan	John Kras	China, Canada, United States
32	8E+07	Movie	Sierra Burgess Is A L	Ian Samuels	Shannon	United States
33	8E+07	Movie	The Most Assassinat	Franck RibiÃ'	Anna Mo	Belgium, United Kingdom, United States
34	8E+07	Movie	CÃ©zanne et moi	Daniele Thom	Guillaum	Belgium, France
36	8.1E+07	Movie	Article 15	Anubhav Sinh	Ayushma	India
38	8.1E+07	Movie	Ee Nagaraniki Emair	Tharun Bhasc	Vishwaks	India
41	8E+07	Movie	Hell and Back	Tom Gianas,	Nick Swai	United States
42	7E+07	Movie	PK	Rajkumar Hir	Aamir Kh	India
43	8E+07	Movie	Hard Tide	Robert Osma	Nathanae	United Kingdom
44	8E+07	Movie	Elstree 1976	Jon Spira	Paul Blak	United Kingdom
46	8E+07	Movie	ATM	Mez Tharator	Chantavit	United States, Canada
47	8.1E+07	Movie	Bangkok Traffic (Lov	Adisorn Tresi	Theerade	Thailand
48	8E+07	Movie	I Fine... Thank You...	Mez Tharator	Preechay	Thailand
49	8.1E+07	Movie	One Day	Banjong Pisa	Chantavit	Thailand
50	7E+07	Movie	Phobia 2	Banjong Pisa	Jirayu La-	Thailand
51	7E+07	Movie	Shutter	Banjong Pisa	Ananda E	Thailand
52	8E+07	Movie	Suckseed	Chayanop Bo	Jirayu La-	Thailand
53	8E+07	Movie	Carrie Pilby	Susan Johnsc	Bel Powle	United States
54	8E+07	Movie	Marc Maron: Too Re	Lynn Shelton	Marc Ma	United States
56	8.1E+07	Movie	Saawan	Farhan Alam	Karam Hu	Pakistan
57	8.1E+07	Movie	The Heretics	Chad Archiba	Nina Kiri,	Canada
58	8.1E+07	Movie	The World We Make	Brian Baugh	Caleb Cas	United States
59	8.1E+07	Movie	Watchman	A. L. Vijay	G.V. Praka	India
60	8E+07	Movie	Black Panther	Ryan Coogler	Chadwick	United States
61	8E+07	Movie	Man Up	Ben Palmer	Lake Bell,	United Kingdom, France
63	8.1E+07	Movie	Mo Gilligan: Momen	Chris Howe	Mo Gillig	United Kingdom
66	7E+07	Movie	Big Miracle	Ken Kwapis	Drew Bar	United States, United Kingdom
72	8E+07	Movie	The Mayor	Park In-je	Min-sik C	South Korea
76	8E+07	Movie	The Debt Collector	Jesse V. Johns	Scott Adk	United Kingdom, United States
77	7E+07	Movie	Act of Vengeance	Mahsun KÄ±r	Haluk Bil,	Turkey, United States
78	8.1E+07	Movie	Paradise Lost	Monique Gar	JÃºlio And	Brazil
79	8E+07	Movie	Gerald's Game	Mike Flanaga	Carla Gug	United States
82	8E+07	Movie	Our Souls at Night	Ritesh Batra	Robert Re	United States

	A	B	C	D	E	F	G	H	I
1		show_id	title	date_adde	release_ye	rating			
2	1	8.1E+07	Norm of th	September	2019	TV-PG			
3	5	8E+07	#realityhi	September	2017	TV-14			
4	7	7E+07	Automata	September	2014	R			
5	8	8E+07	Fabrizio C	September	2017	TV-MA			
6	10	7E+07	Good Peop	September	2014	R			
7	12	7E+07	Kidnappir	September	2015	R			
8	20	8E+07	Love	September	2015	NR			
9	21	8E+07	Manhatta	September	2014	TV-14			
10	22	8E+07	Moonwalk	September	2015	R			
11	24	7E+07	Stonehear	September	2014	PG-13			
12	25	8E+07	The Runne	September	2015	R			
13	26	8E+07	6 Years	September	2015	NR			
14	30	7E+07	Laddaland	September	2011	TV-MA			
15	31	8.1E+07	Next Gen	September	2018	TV-PG			
16	32	8E+07	Sierra Bur	September	2018	PG-13			
17	33	8E+07	The Most /	September	2018	TV-MA			
18	34	8E+07	CÃ©zanne	September	2016	R			
19	36	8.1E+07	Article 15	September	2019	TV-MA			
20	38	8.1E+07	Ee Nagara	September	2018	TV-14			
21	41	8E+07	Hell and B	September	2015	R			
22	42	7E+07	PK	September	2014	TV-14			
23	43	8E+07	Hard Tide	September	2015	TV-MA			
24	44	8E+07	Elstree 19	September	2015	TV-PG			
25	46	8E+07	ATM	September	2012	TV-14			
26	47	8.1E+07	Bangkok T	September	2009	TV-14			
27	48	8E+07	I Fine... Th	September	2014	TV-14			
28	49	8.1E+07	One Day	September	2016	TV-PG			
29	50	7E+07	Phobia 2	September	2009	TV-MA			
30	51	7E+07	Shutter	September	2004	TV-MA			
31	52	8E+07	Suckseed	September	2011	TV-MA			
32	53	8E+07	Carrie Pill	September	2016	TV-14			
33	54	8E+07	Marc Mar	September	2017	TV-MA			
34	56	8.1E+07	Saawan	September	2016	TV-14			
35	57	8.1E+07	The Hereti	September	2017	TV-MA			
36	58	8.1E+07	The World	September	2019	PG			
37	59	8.1E+07	Watchmar	September	2019	TV-14			
38	60	8E+07	Black Pan	September	2018	PG-13			
39	61	8E+07	Man Up	September	2015	R			
40	63	8.1E+07	Mo Gilliga	September	2019	TV-MA			
41	66	7E+07	Big Miracl	September	2012	PG			
42	72	8E+07	The Mayoi	September	2017	TV-MA			

First spreadsheet:

	A	B	C	D	E	F
1		show_id	title	duration	listed_in	description
2	1	8.1E+07	Norm of th	90 min	Children &	Before planning an awesome wedding for his grandfather, a polar bear king must take back a stolen artifact from an evil archaeologist first.
3	5	8E+07	#realityhi	99 min	Comedies	When nerdy high schooler Dani finally attracts the interest of her longtime crush, she lands in the cross hairs of his ex, a social media celebrity.
4	7	7E+07	Automata	110 min	Internatio	In a dystopian future, an insurance adjuster for a tech company investigates a robot killed for violating protocol and discovers a global conspiracy.
5	8	8E+07	Fabrizio C	60 min	Stand-Up	Fabrizio Copano takes audience participation to the next level in this stand-up set while reflecting on sperm banks, family WhatsApp groups and more.
6	10	7E+07	Good Peop	90 min	Action & A	A struggling couple can't believe their luck when they find a stash of money in the apartment of a neighbor who was recently murdered.
7	12	7E+07	Kidnappin	95 min	Action & A	When beer magnate Alfred "Freddy" Heineken is kidnapped in 1983, his abductors make the largest ransom demand in history.
8	20	8E+07	Love	135 min	Cult Movi	A man in an unsatisfying marriage recalls the details of an intense past relationship with an ex-girlfriend when he gets word that she may be missing.
9	21	8E+07	Manhatta	98 min	Comedies	A filmmaker working on a documentary about love in modern Manhattan becomes personally entangled in the romantic lives of his subjects.
10	22	8E+07	Moonwalk	96 min	Action & A	A brain-addled war vet, a failing band manager and a Stanley Kubrick impersonator help the CIA construct an epic scam by faking the 1969 moon landing.
11	24	7E+07	Stonehear	113 min	Horror Mc	In 1899, a young doctor arrives at an asylum for an apprenticeship and becomes suspicious of his mentor's methods while falling for a female patient.
12	25	8E+07	The Runne	90 min	Dramas, I	A New Orleans politician finds his idealistic plans for rebuilding after a toxic oil spill unraveling thanks to a sex scandal.
13	26	8E+07	6 Years	80 min	Dramas, I	As a volatile young couple who have been together for six years approach college graduation, unexpected career opportunities threaten their future.
14	30	7E+07	Laddaland	112 min	Horror Mc	When a family moves into an upscale housing development, they encounter a series of paranormal events that drive them to the edge of insanity.
15	31	8.1E+07	Next Gen	106 min	Children &	When lonely Mai forms an unlikely bond with a top-secret robot, they embark on an intense, action-packed adventure to foil the plot of a vicious villain.
16	32	8E+07	Sierra Bur	106 min	Comedies	A wrong-number text sparks a virtual romance between a smart but unpopular teen and a sweet jock who thinks he's talking to a gorgeous cheerleader.
17	33	8E+07	The Most	102 min	Dramas, I	In 1930s Paris, an actress famous for her gory death scenes at the Grand Guignol Theater contends with a mysterious stalker and ghosts from her past.
18	34	8E+07	Cézanne	114 min	Dramas, I	This historical drama explores the long and often volatile friendship of painter Paul Cézanne and writer Émile Zola, who first met as schoolboys.
19	36	8.1E+07	Article 15	125 min	Dramas, I	The grim realities of caste discrimination come to light as an entitled but upright city cop ventures into India's heartland to investigate a murder.
20	38	8.1E+07	Ee Nagara	133 min	Comedies	In Goa and in desperate need of cash, four childhood friends get another shot at making their long-abandoned dreams of becoming filmmakers come true.
21	41	8E+07	Hell and B	86 min	Action & A	When best friends break a blood oath, one of them is cast away to hell, and the other two must save him from the misfits of the underworld.
22	42	7E+07	PK	146 min	Comedies	Aamir Khan teams with director Rajkumar Hirani to play a social crusader in a political satire on the state of corruption in India.
23	43	8E+07	Hard Tide	79 min	Dramas, I	A drug dealer who's been emulating his father's successful criminal career is forced to go on the run with a young girl in this fact-based thriller.
24	44	8E+07	Elstree 19	102 min	Document	Then and now footage of bit players who appeared in "Star Wars" tells the story of how the film and its legions of fans changed their lives forever.
25	46	8E+07	ATM	122 min	Comedies	When a broken ATM dishes out a fortune, a couple who works at the bank vies to see who can recover the most cash â€" and the loser must find a new job.
26	47	8.1E+07	Bangkok T	126 min	Comedies	After an encounter with an engineer working the night shift for the city train, a 30-year-old woman struggles against all odds to pursue true love.
27	48	8E+07	I Fine... Th	116 min	Comedies	Desperate to go to the U.S. to win back his girlfriend, Yim hires a tutor to teach him English. But things don't go according to plan.
28	49	8.1E+07	One Day	135 min	Dramas, I	When his colleague (and crush) temporarily loses her memory, an overlooked geek seizes the chance to make an impression before she remembers again.
29	50	7E+07	Phobia 2	125 min	Horror Mc	From disfiguring punishments to festering souls, Thai horror masters present five supernatural tales of karma in this sequel to the 4bia anthology.
30	51	7E+07	Shutter	96 min	Horror Mc	After killing a young girl in a hit-and-run accident, a couple is haunted by more than just the memory of their deadly choice.
31	52	8E+07	Suckseed	130 min	Comedies	When his boyhood crush Ern returns, Ped forms a band with his friend to impress her. Romantic rivalries bloom after the talented Ern joins the group.
32	53	8E+07	Carrie Pill	98 min	Comedies	A socially awkward 19-year-old genius makes big plans to step out of her shell and make a friend, get a job and â€" maybe â€" even go on a date.
33	54	8E+07	Marc Mar	70 min	Stand-Up	Battle-scarred stand-up comedian Marc Maron unleashes a storm of ideas about meditation, mortality, documentary films and our weird modern world.
34	56	8.1E+07	Saawan	128 min	Dramas, I	Outcast from society and left to die in the wilderness, a young boy with polio embarks on a journey to connect with his mother. Based on a true story.
35	57	8.1E+07	The Hereti	88 min	Horror Mc	A withdrawn young woman hunted by a malicious cult is abducted by a brooding stranger and undergoes a bizarre transformation.
36	58	8.1E+07	The World	108 min	Dramas, R	A teenage equestrian and a local football player for each other, but simmering racism in their small town puts their relationship to the test.
37	59	8.1E+07	Watchma	93 min	Comedies	Rushing to pay off a loan shark, a young man breaks into a bungalow to steal the cash, unprepared for the dog standing guard â€" or the trouble inside.
38	60	8E+07	Black Pan	135 min	Action & A	T'Challa, the superpowered new leader of the hidden, highly advanced African nation of Wakanda, strives to protect his home from enemies old and new.
39	61	8E+07	Man Up	88 min	Comedies	A single woman seizes an opportunity when, while standing under a train station clock, she meets a stranger who mistakes her for his blind date.
40	63	8.1E+07	Mo Gilliga	64 min	Stand-Up	Comedian Mo Gilligan blends smooth moves and sharp humor as he riffs on humble beginnings, family dynamics and the complex art of dancing in the club.
41	66	7E+07	Big Mirac	107 min	Children &	After a reporter writes about whales trapped in the Arctic Circle, the U.S. and U.S.S.R. team up to rescue them in this tale inspired by true events.
42	72	8E+07	The Mayo	130 min	Dramas, I	With the presidency in mind, the incumbent mayor of Seoul runs for an unprecedented third term â€" and will stop at nothing to keep his secrets hidden.
43	76	8E+07	The Debt C	96 min	Action & A	A broke martial arts instructor takes a side gig with a mobster, who pairs him with a veteran thug for a weekend of fisticuffs-fueled debt collection.
44	77	7E+07	Act of Ven	112 min	Action & A	Two Turkish agents are sent to New York City on a mission to capture a notorious terrorist known only as "Dejjal" (Arabic for Antichrist).

After splitting the dataset, they have been merged based on the primary keys.
Code ->

```
#DATA MERGING
data_frame<-merge(split_1,split_2,by=c("show_id","title"))
new_data<-merge(data_frame,split_3,by=c("show_id","title"))
new_data

write_xlsx(new_data,"C:\\Users\\HP\\Downloads\\netflix_titles.csv (1)\\merged_netflix.xlsx")
```

Merged dataset:

	show_id	type	title	director	cast	country	ate_addrease_ye	rating	duration	listed_in	description
2	8E+07	Movie	Norm of the North: Kin	Richard F	Alan Marr	United States, India, Sout	Septemb	2019	TV-PG	90 min	Children &	Before planning an awesome wedding for his grandfather, a polar bear king must take back a stolen artifact from an evil archaeologist first.
3	8E+07	Movie	#realityhigh	Fernandc	Nesta Co	United States	Septemb	2017	TV-14	99 min	Comedie	When nerdy high schooler Dani finally attracts the interest of her longtime crush, she lands in the cross hairs of his ex, a social media celebrity.
4	7E+07	Movie	Automata	Gabe Ibá	Antonio E	Bulgaria, United States, S	Septemb	2014	R	110 min	Internatio	In a dystopian future, an insurance adjuster for a tech company investigates a robot killed for violating protocol and discovers a global conspiracy.
5	8E+07	Movie	Fabrizio Copano: Solo	Rodrigo T	Fabrizio C	Chile	Septemb	2017	TV-MA	60 min	Stand-Up	Fabrizio Copano takes audience participation to the next level in this stand-up set while reflecting on sperm banks, family WhatsApp groups and more.
6	7E+07	Movie	Good People	Henrik Ru	James Fr	United States, United King	Septemb	2014	R	90 min	Action &	A struggling couple can't believe their luck when they find a stash of money in the apartment of a neighbor who was recently murdered.
7	7E+07	Movie	Kidnapping Mr. Heinek	Daniel Alf	Jim Sturg	Netherlands, Belgium, Un	Septemb	2015	R	95 min	Action &	When beer magnate Alfred "Freddy" Heineken is kidnapped in 1983, his abductors make the largest ransom demand in history.
8	8E+07	Movie	Love		Gaspar N	Karl Glus	France, Belgium	Septemb	2015	NR	135 min	Cult Movi	A man in an unsatisfying marriage recalls the details of an intense past relationship with an ex-girlfriend when he gets word that she may be missing.
9	8E+07	Movie	Manhattan Romance	Tom O'Br	Tom O'Br	United States	Septemb	2014	TV-14	98 min	Comedie	A filmmaker working on a documentary about love in modern Manhattan becomes personally entangled in the romantic lives of his subjects.
10	8E+07	Movie	Moonwalkers	Antoine E	Ron Perlr	France, Belgium	Septemb	2015	R	96 min	Action &	A brain-addled war vet, a failing band manager and a Stanley Kubrick impersonator help the CIA construct an epic scam by faking the 1969 moon landing.
11	7E+07	Movie	Stonehearst Asylum	Brad And	Kate Bec	United States	Septemb	2014	PG-13	113 min	Horror Mc	In 1899, a young doctor arrives at an asylum for an apprenticeship and becomes suspicious of his mentor's methods while falling for a female patient.
12	8E+07	Movie	The Runner	Austin St	Nicolas C	United States	Septemb	2015	R	90 min	Dramas, I	A New Orleans politician finds his idealistic plans for rebuilding after a toxic oil spill unraveling thanks to a sex scandal.
13	8E+07	Movie	6 Years	Hannah F	Taissa Fa	United States	Septemb	2015	NR	80 min	Dramas, I	As a volatile young couple who have been together for six years approach college graduation, unexpected career opportunities threaten their future.
14	7E+07	Movie	Laddaland	Sopon Sι	Saharat S	Thailand	Septemb	2011	TV-MA	112 min	Horror Mc	When a family moves into an upscale housing development, they encounter a series of paranormal events that drive them to the edge of insanity.
15	8E+07	Movie	Next Gen	Kevin R. /	John Kras	China, Canada, United St	Septemb	2018	TV-PG	106 min	Children &	When lonely Mai forms an unlikely bond with a top-secret robot, they embark on an intense, action-packed adventure to foil the plot of a vicious villain.
16	8E+07	Movie	Sierra Burgess Is A Los	Ian Samu	Shannon	United States	Septemb	2018	PG-13	106 min	Comedie	A wrong-number text sparks a virtual romance between a smart but unpopular teen and a sweet jock who thinks he's talking to a gorgeous cheerleader.
17	8E+07	Movie	The Most Assassinate	Franck Ri	Anna Mo	Belgium, United Kingdom	Septemb	2018	TV-MA	102 min	Dramas, I	In 1930s Paris, an actress famous for her gory death scenes at the Grand Guignol Theater contends with a mysterious stalker and ghosts from her past.
18	8E+07	Movie	Cézanne et moi	Daniele T	Guillaume	Belgium, France	Septemb	2016	R	114 min	Dramas, I	This historical drama explores the long and often volatile friendship of painter Paul Cézanne and writer Émile Zola, who first met as schoolboys.
19	8E+07	Movie	Article 15	Anubhav	Ayushma	India	Septemb	2019	TV-MA	125 min	Dramas, I	The grim realities of caste discrimination come to light as an entitled but upright city cop ventures into India's heartland to investigate a murder.
20	8E+07	Movie	Ee Nagaraniki Emaindi	Tharun B	Vishwaks	India	Septemb	2018	TV-14	133 min	Comedie	In Goa and in desperate need of cash, four childhood friends get another shot at making their long-abandoned dreams of becoming filmmakers come true.
21	8E+07	Movie	Hell and Back	Tom Giar	Nick Swa	United States	Septemb	2015	R	86 min	Action &	When best friends break a blood oath, one of them is cast away to hell, and the other two must save him from the misfits of the underworld.

5. Queries and outputs:

```
> df %>%
+   group_by(date_added) %>%
+   group_by(type)%>%
+   count(type,date_added)
# A tibble: 20 × 3
# Groups:   type [2]
     type    date_added      n
     <chr>   <chr>       <int>
 1 Movie    2008            1
 2 Movie    2009            2
 3 Movie    2010            1
 4 Movie    2011           13
 5 Movie    2012            4
 6 Movie    2013            6
 7 Movie    2014           14
 8 Movie    2015           47
 9 Movie    2016          204
10 Movie    2017          778
11 Movie    2018         1122
12 Movie    2019         1347
13 Movie    2020          139
14 TV Show  2013            1
15 TV Show  2015            3
16 TV Show  2016            7
17 TV Show  2017           27
18 TV Show  2018           18
19 TV Show  2019           39
20 TV Show  2020            1
```

```
> df %>%
+   group_by(country) %>%
+   group_by(type)%>%
+   count(type,country)
# A tibble: 459 × 3
# Groups:   type [2]
     type   country                                               n
     <chr>  <chr>                                             <int>
 1 Movie   Argentina                                            25
 2 Movie   Argentina, Brazil, France, Poland, Germany, Denmark   1
 3 Movie   Argentina, Chile                                      1
 4 Movie   Argentina, Chile, Peru                                1
 5 Movie   Argentina, France                                     1
 6 Movie   Argentina, France, Germany                            1
 7 Movie   Argentina, Italy                                      1
 8 Movie   Argentina, Spain                                      5
 9 Movie   Argentina, United States                              1
10 Movie   Argentina, Uruguay, Serbia                            1
# … with 449 more rows
# i Use `print(n = ...)` to see more rows
```

R 4.2.1 · C:/Users/HP/Downloads/netflix_titles.csv (1)/

```
> n<-df %>%
+    group_by(listed_in) %>%
+    count(listed_in)
> arrange(n,desc(n))
# A tibble: 296 × 2
# Groups:    listed_in [296]
    listed_in                                                         n
    <chr>                                                         <int>
 1 Dramas, International Movies                                    237
 2 Stand-Up Comedy                                                234
 3 Dramas, Independent Movies, International Movies                184
 4 Comedies, Dramas, International Movies                          168
 5 Documentaries                                                  136
 6 Children & Family Movies, Comedies                             118
 7 Comedies, International Movies                                  110
 8 Dramas, International Movies, Romantic Movies                  103
 9 Action & Adventure, Dramas, International Movies                99
10 Comedies, International Movies, Romantic Movies                 93
# … with 286 more rows
# i Use `print(n = ...)` to see more rows
```

R 4.2.1 · C:/Users/HP/Downloads/netflix_titles.csv (1)/

```
> df %>%
+    group_by(type) %>%
+    count(type)
# A tibble: 2 × 2
# Groups:    type [2]
  type          n
  <chr>     <int>
1 Movie      3678
2 TV Show      96
```

R 4.2.1 · C:/Users/HP/Downloads/netflix_titles.csv (1)/

```
> df %>%
+    group_by(rating)%>%
+    count(rating)
# A tibble: 14 × 2
# Groups:    rating [14]
    rating        n
    <chr>     <int>
 1 G            35
 2 NC-17         1
 3 NR          175
 4 PG          176
 5 PG-13       278
 6 R           501
 7 TV-14       917
 8 TV-G         54
 9 TV-MA      1189
10 TV-PG       358
11 TV-Y         24
12 TV-Y7        48
13 TV-Y7-FV     11
14 UR            7
```

```
> new<-df %>%
+    group_by(duration)%>%
+    count(type)
> subset(new,new$type=="TV Show")
# A tibble: 10 x 3
# Groups:   duration [10]
   duration    type         n
   <chr>       <chr>     <int>
 1 1 Season    TV Show      65
 2 14 Seasons  TV Show       1
 3 2 Seasons   TV Show       8
 4 3 Seasons   TV Show       4
 5 4 Seasons   TV Show       6
 6 5 Seasons   TV Show       4
 7 6 Seasons   TV Show       2
 8 7 Seasons   TV Show       3
 9 8 Seasons   TV Show       2
10 9 Seasons   TV Show       1
```