

```
In [38]: import numpy as np
import pandas as pd
```

```
In [39]: credits = pd.read_csv('credits.csv')
```

```
In [40]: credits
```

Out[40]:

	cast	crew	id
0	[{'cast_id': 14, 'character': 'Woody (voice)', 'credit_id': '52fe4284c3...}	[{'credit_id': '52fe4284c3a36847f8024f49', 'department': 'Directing', '...	862
1	[{'cast_id': 1, 'character': 'Alan Parrish', 'credit_id': '52fe44bfc3a3...}	[{'credit_id': '52fe44bfc3a36847f80a7cd1', 'department': 'Production', '...	8844
2	[{'cast_id': 2, 'character': 'Max Goldman', 'credit_id': '52fe466a92514...}	[{'credit_id': '52fe466a9251416c75077a89', 'department': 'Directing', '...	15602
3	[{'cast_id': 1, 'character': 'Savannah Vannah Jackson', 'credit_id': '...	[{'credit_id': '52fe44779251416c91011acb', 'department': 'Directing', '...	31357
4	[{'cast_id': 1, 'character': 'George Banks', 'credit_id': '52fe44959251...}	[{'credit_id': '52fe44959251416c75039ed7', 'department': 'Sound', 'gend...	11862
...
45471	[{'cast_id': 0, 'character': '', 'credit_id': '5894a909925141427e0079a5...}	[{'credit_id': '5894a97d925141426c00818c', 'department': 'Directing', '...	439050
45472	[{'cast_id': 1002, 'character': 'Sister Angela', 'credit_id': '52fe4af1...}	[{'credit_id': '52fe4af1c3a36847f81e9b15', 'department': 'Directing', '...	111109
45473	[{'cast_id': 6, 'character': 'Emily Shaw', 'credit_id': '52fe4776c3a368...}	[{'credit_id': '52fe4776c3a368484e0c8387', 'department': 'Directing', '...	67758
45474	[{'cast_id': 2, 'character': '', 'credit_id': '52fe4ea59251416c7515d7d5...}	[{'credit_id': '533bccebc3a36844cf0011a7', 'department': 'Directing', '...	227506
45475	[]	[{'credit_id': '593e676c92514105b702e68e', 'department': 'Directing', '...	461257

45476 rows × 3 columns

```
In [41]: meta = pd.read_csv('movies_metadata.csv')
```

```
/opt/conda/lib/python3.7/site-packages/IPython/core/interactiveshell.py:3063:
DtypeWarning: Columns (10) have mixed types.Specify dtype option on import or
set low_memory=False.
```

```
interactivity=interactivity, compiler=compiler, result=result)
```

```
In [42]: meta['release_date'] = pd.to_datetime(meta['release_date'], errors='coerce')
```

```
In [43]: meta['year'] = meta['release_date'].dt.year
```

```
In [44]: meta['year'].value_counts().sort_index()
```

```
Out[44]: 1874.0      1
1878.0      1
1883.0      1
1887.0      1
1888.0      2
...
2015.0    1905
2016.0    1604
2017.0     532
2018.0       5
2020.0       1
Name: year, Length: 135, dtype: int64
```

```
In [45]: # Getting only 2017 movies as we already have movies up to the year 2016 in pr
# We don't have enough data for the movies from 2018, 2019 and 2020.
# We'll deal with it in the upcoming preprocessing files
new_meta = meta.loc[meta.year == 2017,['genres','id','title','year']]
```

```
In [46]: new_meta
```

```
Out[46]:
```

	genres	id	title	year
26560	[[{'id': 12, 'name': 'Adventure'}, {'id': 28, 'name': 'Action'}, {'id': ...	166426	Pirates of the Caribbean: Dead Men Tell No Tales	2017.0
26561	[[{'id': 28, 'name': 'Action'}, {'id': 12, 'name': 'Adventure'}, {'id': ...	141052	Justice League	2017.0
26565	[[{'id': 28, 'name': 'Action'}, {'id': 12, 'name': 'Adventure'}, {'id': ...	284053	Thor: Ragnarok	2017.0
26566	[[{'id': 28, 'name': 'Action'}, {'id': 12, 'name': 'Adventure'}, {'id': ...	283995	Guardians of the Galaxy Vol. 2	2017.0
30536	[[{'id': 14, 'name': 'Fantasy'}, {'id': 28, 'name': 'Action'}, {'id': 12...	245842	The King's Daughter	2017.0
...
45398	[[{'id': 10749, 'name': 'Romance'}, {'id': 35, 'name': 'Comedy'}]]	468707	Thick Lashes of Lauri Mäntävaara	2017.0
45417	[[{'id': 80, 'name': 'Crime'}, {'id': 35, 'name': 'Comedy'}, {'id': 28, ...	461297	Cop and a Half: New Recruit	2017.0
45437	[[{'id': 10751, 'name': 'Family'}, {'id': 16, 'name': 'Animation'}, {'id'...	455661	In a Heartbeat	2017.0
45453	[[{'id': 80, 'name': 'Crime'}, {'id': 18, 'name': 'Drama'}, {'id': 53, '...	404604	Mom	2017.0
45465	[]	461257	Queerama	2017.0

532 rows × 4 columns

```
In [47]: new_meta['id'] = new_meta['id'].astype(int)
```

```
In [48]: data = pd.merge(new_meta, credits, on='id')
```

```
In [49]: pd.set_option('display.max_colwidth', 75)  
data
```

Out[49]:

	genres	id	title	year	cast	cr
0	[[{'id': 12, 'name': 'Adventure'}, {'id': 28, 'name': 'Action'}, {'id': ...	166426	Pirates of the Caribbean: Dead Men Tell No Tales	2017.0	[[{'cast_id': 1, 'character': 'Captain Jack Sparrow', 'credit_id': '52fe...	[[{'credit_id': '52fe4c9cc3a36847f8236at', 'department': 'Production'
1	[[{'id': 28, 'name': 'Action'}, {'id': 12, 'name': 'Adventure'}, {'id': ...	141052	Justice League	2017.0	[[{'cast_id': 2, 'character': 'Bruce Wayne / Batman', 'credit_id': '535e...	[[{'credit_id': '55ef66dbc3a3686f1700a5', 'department': 'Production'
2	[[{'id': 28, 'name': 'Action'}, {'id': 12, 'name': 'Adventure'}, {'id': ...	284053	Thor: Ragnarok	2017.0	[[{'cast_id': 0, 'character': 'Thor Odinson', 'credit_id': '545d46a80e0a...	[[{'credit_id': '56a93fa4c3a36872db001e', 'department': 'Writing', 'g
3	[[{'id': 28, 'name': 'Action'}, {'id': 12, 'name': 'Adventure'}, {'id': ...	283995	Guardians of the Galaxy Vol. 2	2017.0	[[{'cast_id': 3, 'character': 'Peter Quill / Star-Lord', 'credit_id': '5...	[[{'credit_id': '59171547925141583c0315', 'department': 'Sound', 'gen
4	[[{'id': 14, 'name': 'Fantasy'}, {'id': 28, 'name': 'Action'}, {'id': 12...	245842	The King's Daughter	2017.0	[[{'cast_id': 0, 'character': 'King Louis XIV', 'credit_id': '5431dd580e...	[[{'credit_id': '5431de49c3a36825d30000', 'department': 'Directing',
...
526	[[{'id': 10749, 'name': 'Romance'}, {'id': 35, 'name': 'Comedy'}]	468707	Thick Lashes of Lauri Mäntyvaara	2017.0	[[{'cast_id': 0, 'character': 'Satu', 'credit_id': '597e2086c3a368544001...	[[{'credit_id': '597e22f69251415d7801c7', 'department': 'Directing',
527	[[{'id': 80, 'name': 'Crime'}, {'id': 35, 'name': 'Comedy'}, {'id': 28, ...	461297	Cop and a Half: New Recruit	2017.0	[[{'cast_id': 0, 'character': 'Detective Simmons', 'credit_id': '593ba04...	[[{'credit_id': '593ba0c29251410593009b', 'department': 'Writing', 'g
528	[[{'id': 10751, 'name': 'Family'}, {'id': 16, 'name': 'Animation'}, {'id'...	455661	In a Heartbeat	2017.0	[[{'cast_id': 0, 'character': '...', 'credit_id': '5981a15c92514151e0011b...	[[{'credit_id': '5981a15c92514151e0011b', 'department': 'Sound', 'gen

	genres	id	title	year	cast	cr
529	{'id': 80, 'name': 'Crime'}, {'id': 18, 'name': 'Drama'}, {'id': 53, 'name': 'Sci-Fi'}	404604	Mom	2017.0	{'cast_id': 1, 'character': 'Devki Sabarwal', 'credit_id': '577809adc3...}	{'credit_id': '58ee55bbc3a3683df500bd', 'department': 'Sound', 'gen
530	[]	461257	Queerama	2017.0	[]	{'credit_id': '593e676c92514105b702e6t', 'department': 'Directing',

531 rows × 6 columns

```
In [50]: # evaluates an expression node or a string containing a Python literal or cont
import ast
data['genres'] = data['genres'].map(lambda x: ast.literal_eval(x))
data['cast'] = data['cast'].map(lambda x: ast.literal_eval(x))
data['crew'] = data['crew'].map(lambda x: ast.literal_eval(x))
```

```
In [51]: def make_genresList(x):
    gen = []
    st = " "
    for i in x:
        if i.get('name') == 'Science Fiction':
            scifi = 'Sci-Fi'
            gen.append(scifi)
        else:
            gen.append(i.get('name'))
    if gen == []:
        return np.NaN
    else:
        return (st.join(gen))
```

```
In [52]: data['genres_list'] = data['genres'].map(lambda x: make_genresList(x))
```

```
In [53]: data['genres_list']
```

```
Out[53]: 0      Adventure Action Fantasy Comedy
1      Action Adventure Fantasy Sci-Fi
2      Action Adventure Fantasy Sci-Fi
3      Action Adventure Comedy Sci-Fi
4      Fantasy Action Adventure
...
526      Romance Comedy
527      Crime Comedy Action Family
528      Family Animation Romance Comedy
529      Crime Drama Thriller
530      NaN
Name: genres_list, Length: 531, dtype: object
```

```
In [54]: def get_actor1(x):  
         casts = []  
         for i in x:  
             casts.append(i.get('name'))  
         if casts == []:  
             return np.NaN  
         else:  
             return (casts[0])
```

```
In [55]: data['actor_1_name'] = data['cast'].map(lambda x: get_actor1(x))
```

```
In [56]: def get_actor2(x):  
         casts = []  
         for i in x:  
             casts.append(i.get('name'))  
         if casts == [] or len(casts)<=1:  
             return np.NaN  
         else:  
             return (casts[1])
```

```
In [57]: data['actor_2_name'] = data['cast'].map(lambda x: get_actor2(x))
```

```
In [58]: data['actor_2_name']
```

```
Out[58]: 0      Javier Bardem  
         1      Henry Cavill  
         2      Tom Hiddleston  
         3      Zoe Saldana  
         4      William Hurt  
         ...  
         526     Rosa Honkonen  
         527     Wallace Shawn  
         528             NaN  
         529      Sajal Ali  
         530             NaN  
         Name: actor_2_name, Length: 531, dtype: object
```

```
In [59]: def get_actor3(x):  
         casts = []  
         for i in x:  
             casts.append(i.get('name'))  
         if casts == [] or len(casts)<=2:  
             return np.NaN  
         else:  
             return (casts[2])
```

```
In [60]: data['actor_3_name'] = data['cast'].map(lambda x: get_actor3(x))
```

```
In [61]: data['actor_3_name']
```

```
Out[61]: 0      Geoffrey Rush
          1      Gal Gadot
          2      Cate Blanchett
          3      Dave Bautista
          4      Benjamin Walker
          ...
          526     Tiitus Rantala
          527      Gina Holden
          528              NaN
          529     Akshaye Khanna
          530              NaN
          Name: actor_3_name, Length: 531, dtype: object
```

```
In [62]: def get_directors(x):
          dt = []
          st = " "
          for i in x:
              if i.get('job') == 'Director':
                  dt.append(i.get('name'))
          if dt == []:
              return np.NaN
          else:
              return (st.join(dt))
```

```
In [63]: data['director_name'] = data['crew'].map(lambda x: get_directors(x))
```

```
In [64]: data['director_name']
```

```
Out[64]: 0      Joachim Rønning Espen Sandberg
          1      Zack Snyder
          2      Taika Waititi
          3      James Gunn
          4      Sean McNamara
          ...
          526     Hannaleena Hauru
          527     Jonathan A. Rosenbaum
          528     Beth David Esteban Bravo
          529      Ravi Udyawar
          530     Daisy Asquith
          Name: director_name, Length: 531, dtype: object
```

```
In [65]: movie = data.loc[:,['director_name','actor_1_name','actor_2_name','actor_3_name']]
```


In [66]: movie

Out[66]:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres_list	title
0	Joachim Rønning Espen Sandberg	Johnny Depp	Javier Bardem	Geoffrey Rush	Adventure Action Fantasy Comedy	Pirates of the Caribbean: Dead Men Tell No Tales
1	Zack Snyder	Ben Affleck	Henry Cavill	Gal Gadot	Action Adventure Fantasy Sci-Fi	Justice League
2	Taika Waititi	Chris Hemsworth	Tom Hiddleston	Cate Blanchett	Action Adventure Fantasy Sci-Fi	Thor: Ragnarok
3	James Gunn	Chris Pratt	Zoe Saldana	Dave Bautista	Action Adventure Comedy Sci-Fi	Guardians of the Galaxy Vol. 2
4	Sean McNamara	Pierce Brosnan	William Hurt	Benjamin Walker	Fantasy Action Adventure	The King's Daughter
...
526	Hannaleena Hauru	Inka Haapamäki	Rosa Honkonen	Tiitus Rantala	Romance Comedy	Thick Lashes of Lauri Mäntyaara
527	Jonathan A. Rosenbaum	Lou Diamond Phillips	Wallace Shawn	Gina Holden	Crime Comedy Action Family	Cop and a Half: New Recruit
528	Beth David Esteban Bravo	NaN	NaN	NaN	Family Animation Romance Comedy	In a Heartbeat
529	Ravi Udyawar	Sridevi Kapoor	Sajal Ali	Akshaye Khanna	Crime Drama Thriller	Mom
530	Daisy Asquith	NaN	NaN	NaN	NaN	Queerama

531 rows × 6 columns

In [67]: movie.isna().sum()

Out[67]:

```
director_name    4
actor_1_name    22
actor_2_name    55
actor_3_name    70
genres_list      7
title            0
dtype: int64
```

```
In [68]: movie = movie.dropna(how='any')
```

```
In [69]: movie.isna().sum()
```

```
Out[69]: director_name    0  
actor_1_name             0  
actor_2_name             0  
actor_3_name             0  
genres_list              0  
title                   0  
dtype: int64
```

```
In [70]: movie = movie.rename(columns={'genres_list': 'genres'})  
movie = movie.rename(columns={'title': 'movie_title'})
```

```
In [71]: movie['movie_title'] = movie['movie_title'].str.lower()
```

```
In [72]: movie['comb'] = movie['actor_1_name'] + ' ' + movie['actor_2_name'] + ' ' + mov
```



In [73]: movie

Out[73]:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	c
							Johnny I Ji
0	Joachim Rønning Espen Sandberg	Johnny Depp	Javier Bardem	Geoffrey Rush	Adventure Action Fantasy Comedy	pirates of the caribbean: dead men tell no tales	Bar Gec F Joa Rør E: Sandbe
1	Zack Snyder	Ben Affleck	Henry Cavill	Gal Gadot	Action Adventure Fantasy Sci-Fi	justice league	Ben Af Henry C Gal G Zack Sn A Adver Fant
							(Hemsv
2	Taika Waititi	Chris Hemsworth	Tom Hiddleston	Cate Blanchett	Action Adventure Fantasy Sci-Fi	thor: ragnarok	Hiddle Blani Taika W A Ac
3	James Gunn	Chris Pratt	Zoe Saldana	Dave Bautista	Action Adventure Comedy Sci-Fi	guardians of the galaxy vol. 2	Chris Zoe Sak I Bai James C A Adver Com
4	Sean McNamara	Pierce Brosnan	William Hurt	Benjamin Walker	Fantasy Action Adventure	the king's daughter	Pi Bro: William Benji Walker & McNar Far Ac
...	
524	Jim Strouse	Jessica Williams	Chris O'Dowd	Keith Stanfield	Romance Comedy	the incredible jessica james	Jes Will (O'E t Stanfielc Stri Rom: Con
525	Farhad Mann	Adelaide Kane	Benjamin Hollingsworth	Jean Louisa Kelly	Romance	can't buy my love	Ade t Benji Hollingsv Jean Lc Kelly Fa M Rom:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	c
							Haapa F
526	Hannaleena Hauru	Inka Haapamäki	Rosa Honkonen	Tiitus Rantala	Romance Comedy	thick lashes of lauri mäntyvaara	Honke 1 Rai Hannak H Romi
527	Jonathan A. Rosenbaum	Lou Diamond Phillips	Wallace Shawn	Gina Holden	Crime Comedy Action Family	cop and a half: new recruit	Lou Dian Ph Wa Shawn Hc Jonath Rosenb
529	Ravi Udyawar	Sridevi Kapoor	Sajal Ali	Akshaye Khanna	Crime Drama Thriller	mom	Sr Kapoor Ali Aksl Khanna Udy Crime Dr Th

458 rows × 7 columns

```
In [74]: old = pd.read_csv('data.csv')
```

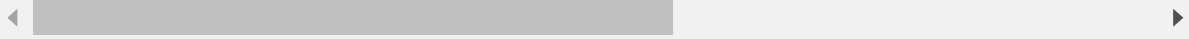
In [75]: old

Out[75]:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title
0	James Cameron	CCH Pounder	Joel David Moore	Wes Studi	Action Adventure Fantasy Sci-Fi	avatar
1	Gore Verbinski	Johnny Depp	Orlando Bloom	Jack Davenport	Action Adventure Fantasy	pirates of the caribbean: at world's end
2	Sam Mendes	Christoph Waltz	Rory Kinnear	Stephanie Sigman	Action Adventure Thriller	spectre
3	Christopher Nolan	Tom Hardy	Christian Bale	Joseph Gordon-Levitt	Action Thriller	the dark knight rises
4	Doug Walker	Doug Walker	Rob Walker	unknown	Documentary	star wars: episode vii - the force awakens
...
5038	Scott Smith	Eric Mabius	Daphne Zuniga	Crystal Lowe	Comedy Drama	signed sealed delivered
5039	unknown	Natalie Zea	Valorie Curry	Sam Underwood	Crime Drama Mystery Thriller	the following
5040	Benjamin Roberds	Eva Boehnke	Maxwell Moody	David Chandler	Drama Horror Thriller	a plague so pleasant
5041	Daniel Hsia	Alan Ruck	Daniel Henney	Eliza Coupe	Comedy Drama Romance	shanghai calling
5042	Jon Gunn	John August	Brian Herzlinger	Jon Gunn	Documentary	my date with drew

5043 rows × 6 columns

In [77]: old['comb'] = old['actor_1_name'] + ' ' + old['actor_2_name'] + ' ' + old['acto



In [78]: old

Out[78]:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	
0	James Cameron	CCH Pounder	Joel David Moore	Wes Studi	Action Adventure Fantasy Sci-Fi	avatar	Pour Dav V (A
1	Gore Verbinski	Johnny Depp	Orlando Bloom	Jack Davenport	Action Adventure Fantasy	pirates of the caribbean: at world's end	Johr Blc D , Ar (W
2	Sam Mendes	Christoph Waltz	Rory Kinnear	Stephanie Sigman	Action Adventure Thriller	spectre	S Sigr
3	Christopher Nolan	Tom Hardy	Christian Bale	Joseph Gordon-Levitt	Action Thriller	the dark knight rises	A Tc Bal Ch Nol
4	Doug Walker	Doug Walker	Rob Walker	unknown	Documentary	star wars: episode vii - the force awakens	Dou Ro Dou Doct
...	Eri
5038	Scott Smith	Eric Mabius	Daphne Zuniga	Crystal Lowe	Comedy Drama	signed sealed delivered	Crys Sc
5039	unknown	Natalie Zea	Valorie Curry	Sam Underwood	Crime Drama Mystery Thriller	the following	Na Valc Un Crim

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	
							Eva
5040	Benjamin Roberds	Eva Boehnke	Maxwell Moody	David Chandler	Drama Horror Thriller	a plague so pleasant	Moo ' f
							A
5041	Daniel Hsia	Alan Ruck	Daniel Henney	Eliza Coupe	Comedy Drama Romance	shanghai calling	Henr Da
							F
							Joh
5042	Jon Gunn	John August	Brian Herzlinger	Jon Gunn	Documentary	my date with drew	H J J Doct

5043 rows × 7 columns

```
In [79]: new = old.append(movie)
```

In [80]: new

Out[80]:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	
0	James Cameron	CCH Pounder	Joel David Moore	Wes Studi	Action Adventure Fantasy Sci-Fi	avatar	Pounder David Weathers CCH Pounder
1	Gore Verbinski	Johnny Depp	Orlando Bloom	Jack Davenport	Action Adventure Fantasy	pirates of the caribbean: at world's end	John Rhee Block David Varner
2	Sam Mendes	Christoph Waltz	Rory Kinnear	Stephanie Sigman	Action Adventure Thriller	spectre	Christoph Waltz Stephanie Sigman
3	Christopher Nolan	Tom Hardy	Christian Bale	Joseph Gordon-Levitt	Action Thriller	the dark knight rises	Torrey C. Bailey Christopher Nolan
4	Doug Walker	Doug Walker	Rob Walker	unknown	Documentary	star wars: episode vii - the force awakens	Doug Walker Rob Walker Doug Walker Documentary
...
524	Jim Strouse	Jessica Williams	Chris O'Dowd	Keith Stanfield	Romance Comedy	the incredible jessica james	Keith Stanfield
525	Farhad Mann	Adelaide Kane	Benjamin Hollingsworth	Jean Louisa Kelly	Romance	can't buy my love	Benjamin Hollingsworth Jean Louisa Kelly

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	
							Hae
							Hc
526	Hannaleena Hauru	Inka Haapamäki	Rosa Honkonen	Tiitus Rantala	Romance Comedy	thick lashes of lauri mäntyvaara	Hani
							Ri
							Lou D
527	Jonathan A. Rosenbaum	Lou Diamond Phillips	Wallace Shawn	Gina Holden	Crime Comedy Action Family	cop and a half: new recruit	Shav
							Jon: Ros
							Kapo
529	Ravi Udyawar	Sridevi Kapoor	Sajal Ali	Akshaye Khanna	Crime Drama Thriller	mom	Ali / Khan L Crime

5501 rows × 7 columns

```
In [81]: new.drop_duplicates(subset ="movie_title", keep = 'last', inplace = True)
```

In [82]: new

Out[82]:

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	
							Poun Dav Wt
0	James Cameron	CCH Pounder	Joel David Moore	Wes Studi	Action Adventure Fantasy Sci-Fi	avatar	C Ad
1	Gore Verbinski	Johnny Depp	Orlando Bloom	Jack Davenport	Action Adventure Fantasy	pirates of the caribbean: at world's end	Johnr ' Bloc Da V Ad
2	Sam Mendes	Christoph Waltz	Rory Kinnear	Stephanie Sigman	Action Adventure Thriller	spectre	Cl Wa St Sigm
3	Christopher Nolan	Tom Hardy	Christian Bale	Joseph Gordon-Levitt	Action Thriller	the dark knight rises	Ac Tor C Bale (Chri Nola
4	Doug Walker	Doug Walker	Rob Walker	unknown	Documentary	star wars: episode vii - the force awakens	Doug Rob u Doug Docu
...	
524	Jim Strouse	Jessica Williams	Chris O'Dowd	Keith Stanfield	Romance Comedy	the incredible jessica james	\ ' Stanf Ri (A
525	Farhad Mann	Adelaide Kane	Benjamin Hollingsworth	Jean Louisa Kelly	Romance	can't buy my love	B Hollin Jear Kelly Ri

	director_name	actor_1_name	actor_2_name	actor_3_name	genres	movie_title	
							Hae
526	Hannaleena Hauru	Inka Haapamäki	Rosa Honkonen	Tiitus Rantala	Romance Comedy	thick lashes of lauri mäntyvaara	Hc Han Ri
527	Jonathan A. Rosenbaum	Lou Diamond Phillips	Wallace Shawn	Gina Holden	Crime Comedy Action Family	cop and a half: new recruit	Lou D , Shav Jon: Rosi
529	Ravi Udyawar	Sridevi Kapoor	Sajal Ali	Akshaye Khanna	Crime Drama Thriller	mom	Kapo Ali / Khan L Crime

5364 rows × 7 columns

```
In [85]: new.to_csv('new_data.csv',index=False)
```

```
In [ ]:
```