1. Write a program of web scrapping using BeautifulSoup to scrape the given data from the following link.

https://editorial.rottentomatoes.com/guide/popular-movies/

On the above link, you'll find 30 Popular movies. Scrape the Movie Title and Rating of that particular movie and make a Dataframe of the same.
Your head of Dataframe should look like below:

	Movie Title	Rating
0	Dungeons & Dragons: Honor Among Thieves	90%
1	John Wick: Chapter 4	94%
2	Tetris	81%
3	Murder Mystery 2	45%
4	I See You	75%

2. Write a program for web scrapping using BeautifulSoup to scrap the following details from the given link and make a Dataframe using that scraped data from the page in a given link.

Link: https://www.politifact.com/factchecks
You will find 30 news articles with factchecks on this page. You need to scrape following details from all the articles and store that in a dataframe.

Statement of News, Date of News, Source of News.

The head of DataFrame should be like following:

	Statement	Date	Source
0	Regarding Trump's January 2021 telephone call ...	April 5, 2023	Donald Trump
1	"Title 42 and other Trump-era holdovers are fo...	April 5, 2023	Joaquin Castro
2	"La mayor parte" del fentanilo que llega a los...	April 5, 2023	Facebook posts
3	Video shows a crowd erupting and Hillary Clint...	April 5, 2023	Facebook posts
4	Video shows Homeland Security Secretary Alejan...	April 5, 2023	Facebook posts

3. You have been provided with html file named 'Scrape_this.html'. Scrape the mentioned data from the given html page using Beautiful soup.

Company Name	Current Price	Change %	Low	High	Value (₹ Cr.)	Volume (in 000's)
Vodafone Idea	7.75	1.44%	7.33	7.88	35.47	45,763.0(
Reliance Power	15.01	-4.52%	14.82	15.62	31.44	20,947.3:
Yes Bank	16.21	-0.12%	16.15	16.35	16.25	10,026.8'
NHPC	45.80	0.57%	45.62	46.82	23.52	5,136.20
IDFC First Bank	82.17	1.11%	81.51	84.35	38.62	4,699.80
PNB	52.88	1.73%	51.83	53.23	21.10	3,990.91
Zee Entertainment	180.35	-2.67%	176.00	188.35	71.06	3,940.34
Tata Steel	113.90	-0.09%	112.85	114.85	36.42	3,197.60
NBCC (India)	40.86	-0.78%	40.66	41.93	10.55	2,581.07
Motherson Sum Sys	85.90	5.84%	82.41	86.15	19.55	2,275.35
HDFC Bank	1635.80	2.00%	1611.50	1637.00	355.57	2,173.68
MRPL	76.83	-2.38%	75.70	79.00	15.41	2,005.35
REC	163.80	7.02%	160.70	168.70	27.37	1,670.93
Edelweiss Financial	51.05	-0.62%	50.70	53.55	8.27	1,619.51
L&T Finance Holdings	123.55	4.61%	121.75	126.85	19.63	1,589.17
Piramal Enterprises	950.30	19.93%	900.10	970.10	144.75	1,523.19
Crompt.Greaves Cons.	294.80	1.64%	290.40	296.45	44.46	1,508.29
GAIL India	106.80	-1.11%	106.50	108.30	16.07	1,505.11
Indiabulls Housing	117.10	3.54%	114.05	117.75	16.74	1,429.61
Union Bank Of India	70.79	-1.02%	70.50	71.59	9.61	1,357.56
Bharti Infratel	166.95	3.92%	160.60	171.65	21.54	1,290.47
NMDC	106.70	0.47%	106.15	108.00	12.83	1,202.77

Above is the example of how your html file will look like. You need to scrape the data from the above table given in html file. You need to scrape the data of all the columns which are highlighted with a black box in above image.

- You need to scrape Company Name, hyperlink (‘href’ link) of company name, Current Price, Value and Volume for all the companies given in the html page. And make a Dataframe combining all the scraped data using pandas. Your output Dataframe should look like below:

	Company Name	Company Link	Current Price	Value	Volume
0	Vodafone Idea	https://www.ndtv.com/business/stock/vodafone-i...	7.75	35.47	45,763.00
1	Reliance Power	https://www.ndtv.com/business/stock/reliance-p...	15.01	31.44	20,947.33
2	Yes Bank	https://www.ndtv.com/business/stock/yes-bank-l...	16.21	16.25	10,026.87
3	NHPC	https://www.ndtv.com/business/stock/nhpc-ltd_nhpc	45.80	23.52	5,136.20
4	IDFC First Bank	https://www.ndtv.com/business/stock/idfc-first...	82.17	38.62	4,699.80
...	...	...	...	...	...
190	MRF	https://www.ndtv.com/business/stock/mrf-ltd_mrf	100429.90	4.73	0.47
191	P&G Hygiene	https://www.ndtv.com/business/stock/procter-ga...	13961.40	0.52	0.37
192	3M India	https://www.ndtv.com/business/stock/3m-india-l...	27181.25	0.82	0.30
193	Abbott India	https://www.ndtv.com/business/stock/abbott-ind...	22685.05	0.64	0.28
194	Bajaj Hold & Invest	https://www.ndtv.com/business/stock/bajaj-hold...	7005.10	0.16	0.23

195 rows × 5 columns

Note: While making a Dataframe store the data of 'Current Price' and 'Value' Columns in a Float Datatype.

After creating a Dataframe,

- Check for any Null values, remove rows if any.
- Remove Duplicate rows if there are any.
- Find and remove outliers from the 'Current Price' column.

Then make a Simper Linear Regression Model using sklearn library,
Where, X=column named 'Value' and Y=column named 'Current Price'.

- Use 20% as test size while you split the data.
- Find co-efficient and intercept of the model.
- Find Mean Squared Error of the model.

➢ **If you are unable to complete the scrapping, you can also attempt Linear Regression by using the data from sample image shown in output format as well. Marks will be given accordingly.**