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The technology and stack and why I choose it?
The technology which I used for this assignment is python3. Python is one of the best languages out there with very large community. Python can be used for most of the tasks like Machine learning, web development, etc

Hours to complete the task?
It took approximately 10 to 12 hours to complete the task (learning time included).

I did research about different libraries for scrapping like beautiful soap but found lxlm as the best one for this task.

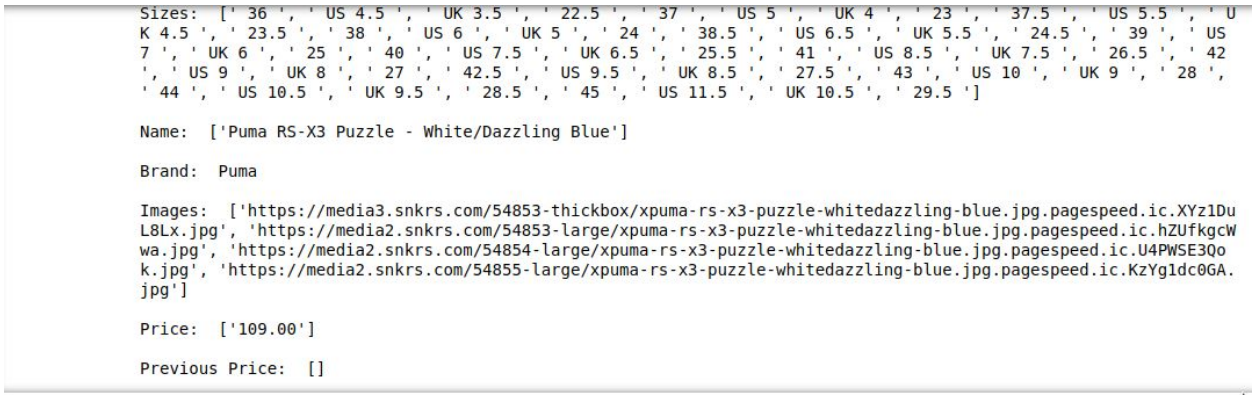
I didn't do it in a day or 2. I completed in small chunks in 6 to 7 days.

Any improvement if given more time?
There is always some room for improving the quality of code.

If I had given more time, I would have followed a more better approach to do this assignment and probably would have written a more quality and more self explanatory code.

Screenshots of OUTPUT.

i) While scrapping data(1)



ii) While scrapping data(2)

```
Price:  ['109.00']

Previous Price:  []

Description:  ['- Puma RS-X3 Puzzle', '- White/Dazzling Blue-Hi Rise', '- Style Code SKU: 371570-05', '- Fall/Wi
nter 2019']


Extracting data from https://www.snkrs.com/en/puma/puma-rs-x3-puzzle-whitespectra-yellow-10474.html

Url:  https://www.snkrs.com/en/puma/puma-rs-x3-puzzle-whitespectra-yellow-10474.html

Sizes:  [' 39 ', ' US 7 ', ' UK 6 ', ' 25 ', ' 40 ', ' US 7.5 ', ' UK 6.5 ', ' 25.5 ', ' 41 ', ' US 8.5 ', ' UK
7.5 ', ' 26.5 ', ' 42 ', ' US 9 ', ' UK 8 ', ' 27 ', ' 42.5 ', ' US 9.5 ', ' UK 8.5 ', ' 27.5 ', ' 43 ', ' US 10
', ' UK 9 ', ' 28 ', ' 44 ', ' US 10.5 ', ' UK 9.5 ', ' 28.5 ', ' 45 ', ' US 11.5 ', ' UK 10.5 ', ' 29.5 ']

Name:  ['Puma RS-X3 Puzzle - White/Spectra Yellow']
```

iii) After data is scrapped and stored in pandas

	Brand	Url	Name	Description	Images	Price	Previous_Price	Sizes	Category
0	Puma	https://www.snkrs.com/en/puma/puma-rs-x3-puzzl...	[Puma RS-X3 Puzzle - White/Dazzling Blue]	[- Puma RS-X3 Puzzle, - White/Dazzling Blue-Hi...	[https://media3.snkrs.com/54853-thickbox/xpuma...	[109.00]	[]	[36 , US 4.5 , UK 3.5 , 22.5 , 37 , US 5...	Men Sneakers
1	Puma	https://www.snkrs.com/en/puma/puma-rs-x3-puzzl...	[Puma RS-X3 Puzzle - White/Spectra Yellow]	[- Puma RS-X3 Puzzle, - White/Spectra Yellow-B...	[https://media3.snkrs.com/55091-thickbox/xpuma...	[109.00]	[]	[39 , US 7 , UK 6 , 25 , 40 , US 7.5 , ...	Men Sneakers
2	Puma	https://www.snkrs.com/en/puma/puma-rs-x3-puzzl...	[Puma RS-X3 Puzzle PRM - White]	[- Puma RS-X3 Puzzle PRM , - White/Limepunch, ...	[https://media3.snkrs.com/55080-thickbox/xpuma...	[119.00]	[]	[40 , US 7.5 , UK 6.5 , 25.5 , 41 , US 8...	Men Sneakers
3	Puma	https://www.snkrs.com/en/puma/puma-rs-x3-puzzl...	[Puma RS-X3 Puzzle PRM - Black/Hot Coral]	[]	[https://media.snkrs.com/55086-thickbox/xpuma-...	[119.00]	[]	[40 , US 7.5 , UK 6.5 , 25.5 , 41 , US 8...	Men Sneakers
4	Jordan	https://www.snkrs.com/en/jordan/jordan-air-jor...	[Jordan Air Jordan 4 Retro GS - What The]	[- Air Jordan 4 Retro , - « What The » edition...	[https://media3.snkrs.com/54941-thickbox/xjord...	[140.00]	[]	[37.5 , US 5Y , UK 4 , 23.5 , 38 , US 5....	Men Sneakers
...	...	...	...	...	...	...	...	...	...

iv) Analysis for finding the min, max and average of each product

```
adidas
Max Price:299.0 € [Product Name:adidas Performance Alphaedge 4D - Star Wars,Product Url:https://www.snkrs.com/e
n/adidas-performance/adidas-performance-alphaedge-4d-star-wars-10390.html]

Min Price:53.4 € [Product Name:adidas Tyshawn - Core Black/White,Product Url:https://www.snkrs.com/en/adidas/adi
das-tyshawn-core-blackwhite-9963.html]

Average Brand Price:116.62682926829277

Stussy
Max Price:199.0 € [Product Name:Stussy Mix Up Cord Jacket - Brown,Product Url:https://www.snkrs.com/en/stussy/st
ussy-mix-up-cord-jacket-brown-10425.html]

Min Price:49.0 € [Product Name:Stussy Big Logo Plaid Low Pro Cap - Black,Product Url:https://www.snkrs.com/en/st
ussy/stussy-big-logo-plaid-low-pro-cap-black-10430.html]

Average Brand Price:107.44444444444444

Reebok
```

v) Count of the products that are on sale

```
Sale_Count = df.loc[df.Previous_Price > 0].groupby('Brand')['Name'].count()
```

```
print(Sale_Count)
```

```
Brand
Asics       13
Carhartt     2
Converse    12
Jordan      11
New         20
Nike        77
Puma         6
Reebok       4
Vans         9
adidas      22
Name: Name, dtype: int64
```