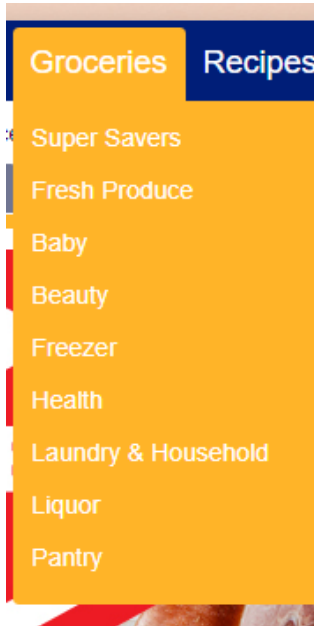


ShopGrok Python Exercises

[Python tech Test](#)

1. Write a basic python scrapy crawler using [scrapy library](#) for <https://www.aldi.com.au/> that:
 - a. **Navigates** to the **Groceries** menu item (ignore the other top menu items like Special Buys, Recipes, etc) and **loops** through the submenu items within Groceries (ie Super Savers, Fresh Produce, etc)



- b. **Loops** through each product tile on the page
- c. **Yields** an item per product with the following fields:
 - i. Product_title
 - ii. Product_image
 - iii. Packsize
 - iv. Price
 - v. Price per unit



Berg Brazilian Style Sausages 300g

300g **\$3.69**
\$12.30 per kg



Huon Fresh Tasmanian Ocean Trout Skin On 460g

460g **\$11.99**
\$26.07 per kg



Ingham's Chicken and Corn Schnitzel 1kg

1kg **\$8.99**
\$8.99 per kg



KRC Pork Cordon Bleu 480g

480g **\$8.99**
\$18.73 per kg

Please provide your answer as either a link to a git repo or a .py file containing the Scrapy code, along with a CSV file containing the output

2. Regular expressions

2.1 Write the python code that uses regular expressions to extract the numerical product count from the variable `product_count_text` below, and converts it to integer (int) format

```
import re
product_count_text = "381 Products found"
product_count_int = int([Insert code here])
```

2.2 Write the python code that uses a single search pattern to extract the sequence of characters after the final "/", before the "-" character, in each url.

```
import re

generic_urls =
["https://www.genericdomain.com/abc/def/1290aodwb23-ghi.img",
"https://www.genericdomain.com/ab-c/31287bdwakj-jkl.img",
"https://www.genericdomain.com/19unioawd02-jkl.img"]

for url in generic_urls:
    special_sequence = [Insert code here]
```

2.3 Assume that you have extracted the below string from the 'script' tag of a web page. Use python regular expressions (i.e the 're' library) to convert the string into a format that can be loaded via the python json library. I.e the below code should not throw any errors after the code is formatted properly.

```
import json
import re
product_storage_string_raw = **as per below**
product_storage_parsed = [Insert code here]
product_storage_json = json.loads(product_storage_parsed)

product_storage_string_raw = '''
<script>
    var products_storage=[];
    products_storage= [{"price":19.0,"name":"House & Home
Hooded Blanket - Charcoal","id":"671282","position":1,"list":"Product
Category - Level 2","category":"Home/Bedding/Blankets","brand":"House
```

& Home"}, {"price":5.0,"name":"House & Home 225TC Pillowcase - Dance All Night - White","id":"649566","position":2,"list":"Product Category - Level 2","category":"Home/Bedding/Pillow Cases","brand":"House & Home"}, {"price":59.0,"name":"House & Home Linen Cotton Quilt Cover Set - Frayed Edge - Charcoal - Queen","id":"659975","position":3,"list":"Product Category - Level 2","category":"Home/Bedding/Quilt Covers"}, {"price":59.0,"name":"House & Home Linen Cotton Quilt Cover Set - Frayed Edge - Navy - Queen","id":"659976","position":4,"list":"Product Category - Level 2","category":"Home/Bedding/Quilt Covers","brand":"House & Home"}, {"price":10.0,"name":"Tontine Winter Comfort Medium Pillow","id":"668702","position":5,"list":"Product Category - Level 2","category":"Home/Bedding/Pillows","brand":"Tontine"}, {"price":15.0,"name":"House & Home Woven Cushion - Grey","id":"662158","position":6,"list":"Product Category - Level 2","category":"Home/Bedding/Pillows","brand":"House & Home"}, {"price":25.0,"name":"House & Home Melange Plush Blanket - Grey Blue - Queen","id":"656994","position":7,"list":"Product Category - Level 2","category":"Home/Bedding/Blankets","brand":"House & Home"}, {"price":24.0,"name":"House & Home Polar Fleece Sheet Set - Silver Grey","id":"BIGW659721","position":8,"list":"Product Category - Level 2","category":"Home/Bedding/Sheets","brand":"House & Home"}, {"price":39.0,"name":"Incredibles Quilt Cover Set - Red - Single","id":"675844","position":9,"list":"Product Category - Level 2","category":"Home/Bedding/Kids Bedding","brand":"Disney"}, {"price":27.0,"name":"House & Home Plain Blush Flannelette Sheet Set","id":"BIGW660776","position":10,"list":"Product Category - Level 2","category":"Home/Bedding/Sheets","brand":"House & Home"}, {"price":89.0,"name":"House & Home Marilyne 7 Piece Comforter Set","id":"BIGW659777","position":11,"list":"Product Category - Level 2","category":"Home/Bedding/Comforters","brand":"House & Home"}, {"price":39.0,"name":"House & Home Kids Foxy 180 Thread Count Comforter Set","id":"BIGW662598","position":12,"list":"Product Category - Level 2","category":"Home/Bedding/Comforters","brand":"House & Home Kids"}, {"price":39.0,"name":"House & Home Kids Comforter Set - Dakota","id":"BIGW662602","position":13,"list":"Product Category - Level 2","category":"Home/Bedding/Comforters","brand":"House & Home Kids"}, {"price":39.0,"name":"House & Home Kids Comforter Set - Xavier","id":"BIGW662604","position":14,"list":"Product Category - Level 2","category":"Home/Bedding/Comforters","brand":"House & Home"}]

```
Kids"}, {"price":39.0,"name":"House & Home Kids Pia 180 Thread Count  
Comforter Set","id":"BIGW662606","position":15,"list":"Product  
Category - Level  
2","category":"Home/Bedding/Comforters","brand":"House & Home  
Kids"}, {"price":35.0,"name":"House & Home Waffle Blanket - Taupe -  
Queen","id":"429199","position":16,"list":"Product Category - Level  
2","category":"Home/Bedding/Blankets","brand":"House &  
Home"}, {"price":59.0,"name":"House & Home Blue Washed Pinstripe  
Coverlet - Queen","id":"660111","position":17,"list":"Product  
Category - Level 2","category":"Home/Bedding/Quilt  
Covers","brand":"House & Home"}, {"price":9.0,"name":"Smart Value  
Quilt Cover Set - Iron Gate -  
King","id":"554307","position":18,"list":"Product Category - Level  
2","category":"Home/Bedding/Quilt Covers"}, {"price":9.0,"name":"Smart  
Value Quilt Cover Set - Iron Gate -  
Single","id":"554304","position":19,"list":"Product Category - Level  
2","category":"Home/Bedding/Quilt Covers","brand":"Smart  
Value"}, {"price":39.0,"name":"Trolls Quilt Cover Set - Pink -  
Single","id":"630753","position":20,"list":"Product Category - Level  
2","category":"Home/Bedding/Kids  
Bedding","brand":"Trolls"}, {"price":29.0,"name":"House & Home 225 TC  
Quilt Cover Set - Holly -  
Queen","id":"660472","position":21,"list":"Product Category - Level  
2","category":"Home/Bedding/Quilt Covers","brand":"House &  
Home"}, {"price":59.0,"name":"House & Home Faux Velvet Coverlet Set -  
Blush - Queen","id":"660200","position":22,"list":"Product Category -  
Level 2","category":"Home/Bedding/Quilt Covers","brand":"House &  
Home"}, {"price":49.0,"name":"House & Home Queen Quilt Cover Set -  
Chambray - Light Blue -  
Queen","id":"659713","position":23,"list":"Product Category - Level  
2","category":"Home/Bedding/Quilt Covers","brand":"House &  
Home"}, {"price":49.0,"name":"House & Home Queen Quilt Cover Set -  
Chambray - Dusty Pink -  
Queen","id":"659714","position":24,"list":"Product Category - Level  
2","category":"Home/Bedding/Quilt Covers","brand":"House & Home"}];  
</script>'''
```