**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(re.match('\d+', product\_count\_text).group())

**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 = re.findall('/(?!.+/)([^-]+)', url).group()

**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 = re.findall('\[{.\*}\]', product\_storage\_string\_raw.group()

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>'''