

Scraping Books

Python reminder

Numeric Types

```
In [2]: type(42)
```

```
Out[2]: int
```

```
In [3]: type(3.14)
```

```
Out[3]: float
```

```
In [4]: 4 + 9.5
```

```
Out[4]: 13.5
```

```
In [5]: abs(-5)
```

```
Out[5]: 5
```

Booleans

```
In [7]: type(True) # or type(False)
```

```
Out[7]: bool
```

```
In [10]: True and False
```

```
Out[10]: False
```

```
In [11]: True or False
```

```
Out[11]: True
```

```
In [12]: not True
```

```
Out[12]: False
```

Comparisons

```
In [13]: 5 < 3 # Strictly less than
```

```
Out[13]: False
```

```
In [14]: 4 <= 4 # Less than or equal
```

```
Out[14]: True
```

```
In [15]: "boris" == "seb" # equal, note the `double` =
```

Out[15]: False

In [16]: `"boris" != "seb" # not equal`

Out[16]: True

Text Sequence Type (Strings, str)

In [17]: `"boris"`

Out[17]: 'boris'

In [18]: `"boris".capitalize()`

Out[18]: 'Boris'

In [19]: `capitalize("boris")`

```
-----  
NameError                                Traceback (most recent call last)  
Cell In [19], line 1  
----> 1 capitalize("boris")  
  
NameError: name 'capitalize' is not defined
```

In [23]: `" boris ".rstrip()`

Out[23]: ' boris'

In [24]: `" boris ".lstrip()`

Out[24]: 'boris '

In [25]: `" boris ".strip()`

Out[25]: 'boris'

In [26]: `type(int("42"))`

Out[26]: int

Advanced Data Structure

List

In [27]: `["apple", "cherries", "banana"]`

Out[27]: ['apple', 'cherries', 'banana']

In [28]: `len(["apple", "cherries", "banana"])`

Out[28]: 3

In [29]: `"banana" in ["apple", "cherries", "banana"]`

```
Out[29]: True
```

Dict

```
In [30]: {'city': 'Paris', 'population': 2_141_000}
```

```
Out[30]: {'city': 'Paris', 'population': 2141000}
```

```
In [31]: len({'city': 'Paris', 'population': 2_141_000})
```

```
Out[31]: 2
```

```
In [32]: 'city' in {'city': 'Paris', 'population': 2_141_000}
```

```
Out[32]: True
```

Variables

```
In [34]: name = 'John' # Assignment
         print(name)
```

```
John
```

```
In [35]: name = 'Paul' # Re-assignment
         print(name)
```

```
Paul
```

```
In [36]: first_name = 'John'
         last_name = 'Lennon'
```

```
In [37]: full_name = first_name + last_name
         print(full_name)
```

```
JohnLennon
```

Interpolation

```
In [38]: sentence = f'Hi, my name is {first_name} {last_name}'
         print(sentence)
```

```
Hi, my name is John Lennon
```

list operations

```
In [39]: # Indexes:      0      1      2
         beatles = ['john', 'paul', 'ringo']
```

```
In [40]: beatles[0] # Read
```

```
Out[40]: 'john'
```

```
In [41]: beatles.append('george') # Create (in place)
         print(beatles)
```

```
['john', 'paul', 'ringo', 'george']
```

```
In [42]: beatles[1] = 'Paul' # Update (in place)
         print(beatles)
```

```
['john', 'Paul', 'ringo', 'george']
```

dict operations

```
In [43]: instruments = {'john': 'guitar', 'paul': 'bass'} # Keys are `str`, Values too
```

```
In [44]: instruments['john'] # Read
```

```
Out[44]: 'guitar'
```

```
In [45]: instruments['ringo'] = 'drums' # Create / Update
print(instruments)

{'john': 'guitar', 'paul': 'bass', 'ringo': 'drums'}
```

```
In [46]: del instruments['john']
instruments
```

```
Out[46]: {'paul': 'bass', 'ringo': 'drums'}
```

What will happen if we run `instruments['john']`?

```
In [47]: instruments['john']
```

```
-----
KeyError                                Traceback (most recent call last)
Cell In [47], line 1
----> 1 instruments['john']

KeyError: 'john'
```

```
In [49]: print(instruments.get('john'))
```

```
None
```

```
In [50]: instruments.get('john', 'Default instrument')
```

```
Out[50]: 'Default instrument'
```

Control Flow

if statement

```
In [51]: age = int(input("How old are you?"))

if age >= 21:
    print("You can become president")
elif age >= 18:
    print("You can vote")
else:
    print("Be patient!")
```

```
You can vote
```

for statement (on a list)

```
In [52]: words = ['cat', 'wolf', 'beetle']
for word in words:
    print(word.upper())
```

CAT
WOLF
BEETLE

for statement (on a dict)

```
In [54]: instruments
```

```
Out[54]: {'paul': 'bass', 'ringo': 'drums'}
```

```
In [61]: instruments.keys()
```

```
Out[61]: dict_keys(['paul', 'ringo'])
```

```
In [62]: instruments.values()
```

```
Out[62]: dict_values(['bass', 'drums'])
```

```
In [63]: instruments.items()
```

```
Out[63]: dict_items([('paul', 'bass'), ('ringo', 'drums')])
```

```
In [55]: for beatle, instrument in instruments.items():  
         print(f'{beatle.capitalize()} plays the {instrument}')
```

Paul plays the bass
Ringo plays the drums

while loop

```
In [64]: i = 1  
         while i <= 4:  
             print(i)  
             i = i + 1
```

1
2
3
4

Functions

```
In [65]: def is_even(number):  
         return number % 2 == 0
```

The function is named is_even The function takes 1 parameter: number (int) The function returns a bool

```
In [66]: result = is_even(42)  
         print(result)
```

True

Lets Scrape !

Lets imports librairies to help us scrap !

```
In [12]: import requests
```

```
from bs4 import BeautifulSoup
```

```
import pandas as pd
```

```
%matplotlib inline
```

```
import matplotlib
```

```
In [2]: response = requests.get("https://books.toscrape.com/index.html")
```

Understand the request/response

```
In [13]: response.status_code
```

```
Out[13]: 200
```

```
In [14]: response.content
```

```
Out[14]: b'<!DOCTYPE html>\n<!--[if lt IE 7]>          <html lang="en-us" class="no-js lt-ie9 lt-ie8
lt-ie7"> <![endif]-->\n<!--[if IE 7]>          <html lang="en-us" class="no-js lt-ie9 lt-
ie8"> <![endif]-->\n<!--[if IE 8]>          <html lang="en-us" class="no-js lt-ie9"> <![e
ndif]-->\n<!--[if gt IE 8]><!--> <html lang="en-us" class="no-js"> <!--<![endif]-->\n
<head>\n          <title>\n      All products | Books to Scrape - Sandbox\n</title>\n\n      <meta http-equiv="content-type" content="text/html; charset=UTF-8" />\n          <meta
name="created" content="24th Jun 2016 09:29" />\n          <meta name="description" conten
t="" />\n          <meta name="viewport" content="width=device-width" />\n          <meta na
me="robots" content="NOARCHIVE,NOCACHE" />\n\n          <!-- Le HTML5 shim, for IE6-8 supp
ort of HTML elements -->\n          <!--[if lt IE 9]>\n          <script src="//html5shim.go
oglecode.com/svn/trunk/html5.js"></script>\n          <![endif]-->\n\n          \n
      <link rel="shortcut icon" href="static/oscar/favicon.ico" />\n          \n\n          \n
      \n          \n          <link rel="stylesheet" type="text/css" href="static/oscar/cs
s/styles.css" />\n          \n          <link rel="stylesheet" href="static/oscar/js/bootstrap-datet
imepicker/bootstrap-datetimepicker.css" />\n          <link rel="stylesheet" type="text/css" h
ref="static/oscar/css/datetimepicker.css" />\n\n\n          \n          \n\n          \n\n
      \n          \n          \n\n          \n          </head>\n\n          <body id="default" clas
s="default">\n          \n          \n          \n          \n          <header class="header container-flui
d">\n          <div class="page_inner">\n          <div class="row">\n          <div
class="col-sm-8 h1"><a href="index.html">Books to Scrape</a><small> We love being scr
aped!</small>\n</div>\n\n          \n          </div>\n          </div>\n          </hea
der>\n\n          \n          \n<div class="container-fluid page">\n          <div class="page_inner">\n
          \n          <ul class="breadcrumb">\n          <li>\n          <a href="index.html">Home
</a>\n          </li>\n          <li class="active">All products</li>\n          </ul>\n\n
<div class="row">\n          <aside class="sidebar col-sm-4 col-md-3">\n
          \n          <div id="promotions_left">\n          \n          \n          \n
</div>\n          \n          \n          \n          \n          <div class="side_categories">\n
          <ul class="nav nav-list">\n          \n          <li>\n
          <a href="catalogue/category/books_1/index.html">\n
          \n          Books\n          \n          \n
          </a>\n          </li>\n          <li>\n
          <a href="catalogue/category/books/travel_2/index.html">\n
          \n          Travel\n          \n          \n          </a>\n          </li>\n
          <li>\n
          <a href="catalogue/category/books/mystery_3/index.html">\n
          \n          Mystery\n          \n          \n          </a>\n          </li>\n
          <li>\n
          <a href="catalogue/category/books/historical-fiction_4/index.html">\n
          \n          Historical Fiction\n          \n          \n          </a>\n          </li>\n
          <li>\n
          <a href="catalogue/category/books/sequential-art_5/index.html">\n
          \n          Sequential Art\n          \n          \n          </a>\n          </li>\n
          <li>\n
          <a href="catalogue/category/books/classics_6/index.

```

[illegible]

Paranormal

[Art](catalogue/category/books/art_25/index.html)

[Psychology](catalogue/category/books/psychology_26/index.html)

[Autobiography](catalogue/category/books/autobiography_27/index.html)

[Parenting](catalogue/category/books/parenting_28/index.html)

[Adult Fiction](catalogue/category/books/adult-fiction_29/index.html)

[Humor](catalogue/category/books/humor_30/index.html)

[Horror](catalogue/category/books/horror_31/index.html)

[History](catalogue/category/books/history_32/index.html)

[Food and Drink](catalogue/category/books/food-and-drink_33/index.html)

[Christian Fiction](catalogue/category/books/christian-fiction_34/index.html)

[Business](catalogue/category/books/business_35/index.html)

[Biography](catalogue/category/books/biography_36/index.html)

[Thriller](catalogue/category/books/thriller_37/index.html)

[Contemporary](catalogue/category/books/contemporary_38/index.html)

[Spirituality](catalogue/category/books/spirituality_39/index.html)

[Academic](catalogue/category/books/academic_40/index.html)

[Self Help](catalogue/category/books/self-help_41/index.html)

[Historical](catalogue/category/books/historical_42/index.html)


```

Historical

```

[Christian](catalogue/category/books/christian_43/index.html)

[Suspense](catalogue/category/books/suspense_44/index.html)

[Short Stories](catalogue/category/books/short-stories_45/index.html)

[Novels](catalogue/category/books/novels_46/index.html)

[Health](catalogue/category/books/health_47/index.html)

[Politics](catalogue/category/books/politics_48/index.html)

[Cultural](catalogue/category/books/cultural_49/index.html)

[Erotica](catalogue/category/books/erotica_50/index.html)

[Crime](catalogue/category/books/crime_51/index.html)

All products

Messages

Promotions

1000 results - showing 1 to 20

Warning! This is a demo website for web scraping purposes. Prices and ratings here were randomly assigned and have no real meaning.

A Light in the Attic

A Light in the ...

Add to basket

[illegible]

```

        \n\n\n\n\n\n\n      <form>\n          <button type="submit" class="btn btn-p
primary btn-block" data-loading-text="Adding...">Add to basket</button>\n      </form>\n\n
\n          \n          </div>\n          \n          </article>\n\n\n</li>\n
\n          \n          <li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">\n\n\n\n
\n\n\n\n\n      <article class="product_pod">\n          \n          <div class="image_conta
iner">\n              \n              \n              <a href="catalogue/t
he-requiem-red_995/index.html"></a>\n                  \n
\n              </div>\n          \n\n          \n          \n          <p class
="star-rating One">\n              <i class="icon-star"></i>\n
<i class="icon-star"></i>\n          <i class="icon-star"></i>\n
          <i class="icon-star"></i>\n          </p>\n          \n          \n\n          \n          <h3><a href="catalogue/the
-requiem-red_995/index.html" title="The Requiem Red">The Requiem Red</a></h3>\n
\n\n          \n          <div class="product_price">\n          \n\n\n\n\n\n\n\n
\n          <p class="price_color">\xc2\xa322.65</p>\n          \n\n<p class="instock availabili
ty">\n          <i class="icon-ok"></i>\n          \n          In stock\n          \n</p>\n\n
\n          \n\n\n\n\n\n\n\n          \n          <form>\n              <button type="submit" clas
s="btn btn-primary btn-block" data-loading-text="Adding...">Add to basket</button>\n
</form>\n\n\n          \n          </div>\n          \n          </article>\n\n\n</li>\n
\n          \n          <li class="col-xs-6 col-sm-4 col-md-3 col-lg
-3">\n\n\n\n\n\n\n\n      <article class="product_pod">\n          \n          <div class="i
mage_container">\n              \n              \n              <a href="c
atalogue/the-dirty-little-secrets-of-getting-your-dream-job_994/index.html"></a>\n                  \n
\n              </div>\n          \n\n          \n          \n          <p class="star-ra
ting Four">\n              <i class="icon-star"></i>\n          <i class
="icon-star"></i>\n          <i class="icon-star"></i>\n          <i
class="icon-star"></i>\n          </p>\n          \n          \n\n          \n          <h3><a href="catalogue/the-dirty-l
little-secrets-of-getting-your-dream-job_994/index.html" title="The Dirty Little Secrets
of Getting Your Dream Job">The Dirty Little Secrets ...</a></h3>\n          \n\n          \n
          <div class="product_price">\n          \n\n\n\n\n\n\n\n          \n          <p
class="price_color">\xc2\xa333.34</p>\n          \n\n<p class="instock availability">\n          <i
class="icon-ok"></i>\n          \n          In stock\n          \n</p>\n\n
          \n          \n\n\n\n\n\n\n\n          \n          <form>\n              <button type="submit" class="btn btn-p
primary btn-block" data-loading-text="Adding...">Add to basket</button>\n          </form>\n\n
\n          \n          </div>\n          \n          </article>\n\n\n</li>\n
\n          \n          <li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">\n\n\n\n
\n\n\n\n\n      <article class="product_pod">\n          \n          <div class="image_conta
iner">\n              \n              \n              <a href="catalogue/t
he-coming-woman-a-novel-based-on-the-life-of-the-infamous-feminist-victoria-woodhull_99
3/index.html"></a>\n                  \n
\n              </div>\n          \n\n          \n          \n          <p class="star-rating Three">\n
          <i class="icon-star"></i>\n          <i class="icon-star"></i>\n
          <i class="icon-star"></i>\n          <i class="icon-star"></i>\n
          </p>\n          \n          \n\n          \n          <h3><a href="catalogue/the-coming-woman-a-novel-based-on-the
-life-of-the-infamous-feminist-victoria-woodhull_993/index.html" title="The Coming Woma
n: A Novel Based on the Life of the Infamous Feminist, Victoria Woodhull">The Coming Woma
n: A ...</a></h3>\n          \n\n          \n          <div class="product_price">\n
          \n\n\n\n\n\n\n\n          \n          <p class="price_color">\xc2\xa317.93</p>\n          \n
\n          <p class="instock availability">\n          <i class="icon-ok"></i>\n          \n          In stock
\n          \n</p>\n\n
          \n          \n\n\n\n\n\n\n\n          \n          <form>\n              <button type="submit" class="btn btn-primary btn-block" data-loading-text="Addin
g...">Add to basket</button>\n          </form>\n\n\n          \n          </div>\n
          \n          </article>\n\n\n</li>\n          \n          <li class
="col-xs-6 col-sm-4 col-md-3 col-lg-3">\n\n\n\n\n\n\n\n      <article class="product_pod">\n
          \n          <div class="image_container">\n              \n              \n              <a href="catalogue/the-boys-in-the-boat-nine-americans-and-thei
r-epic-quest-for-gold-at-the-1936-berlin-olympics_992/index.html"></a>\n

```

[illegible]

[Our Band Could Be Your Life: Scenes from the American Indie Underground, 1981-1991](#)

Our Band Could Be ...

£357.25

In stock

Add to basket

Olio

4.0

[Olio](#)

£323.88

In stock

Add to basket

Mesaerion: The Best Science Fiction Stories 1800-1849

£337.59

In stock

Add to basket

Libertarianism for Beginners

£351.33

In stock

Add to basket


```
<link href="static/oscar/js/bootstrap-datetimepicker/bootstrap-datetimepicker.css" rel
="stylesheet"/>
<link href="static/oscar/css/datetimepicker.css" rel="stylesheet" type="text/css"/>
</head>
<body class="default" id="default">
<header class="header container-fluid">
<div class="page_inner">
<div class="row">
<div class="col-sm-8 h1"><a href="index.html">Books to Scrape</a><small> We love being s
craped!</small>
</div>
</div>
</div>
</div>
</header>
<div class="container-fluid page">
<div class="page_inner">
<ul class="breadcrumb">
<li>
<a href="index.html">Home</a>
</li>
<li class="active">All products</li>
</ul>
<div class="row">
<aside class="sidebar col-sm-4 col-md-3">
<div id="promotions_left">
</div>
<div class="side_categories">
<ul class="nav nav-list">
<li>
<a href="catalogue/category/books_1/index.html">

Books

</a>

<ul>
<li>
<a href="catalogue/category/books/travel_2/index.html">

Travel

</a>

</li>
<li>
<a href="catalogue/category/books/mystery_3/index.html">

Mystery

</a>

</li>
<li>
<a href="catalogue/category/books/historical-fiction_4/index.html">

Historical Fiction

</a>

</li>
<li>
<a href="catalogue/category/books/sequential-art_5/index.html">

Sequential Art

</a>

</li>
<li>
<a href="catalogue/category/books/classics_6/index.html">
```


Philosophy

Romance

Womens Fiction

Fiction

Childrens

Religion

Nonfiction

Music

Default


```
</li>
<li>
<a href="catalogue/category/books/science-fiction_16/index.html">

        Science Fiction

    </a>
</li>
<li>
<a href="catalogue/category/books/sports-and-games_17/index.html">

        Sports and Games

    </a>
</li>
<li>
<a href="catalogue/category/books/add-a-comment_18/index.html">

        Add a comment

    </a>
</li>
<li>
<a href="catalogue/category/books/fantasy_19/index.html">

        Fantasy

    </a>
</li>
<li>
<a href="catalogue/category/books/new-adult_20/index.html">

        New Adult

    </a>
</li>
<li>
<a href="catalogue/category/books/young-adult_21/index.html">

        Young Adult

    </a>
</li>
<li>
<a href="catalogue/category/books/science_22/index.html">

        Science

    </a>
</li>
<li>
<a href="catalogue/category/books/poetry_23/index.html">

        Poetry

    </a>
</li>
<li>
<a href="catalogue/category/books/paranormal_24/index.html">

        Paranormal

    </a>
</li>
<li>
<a href="catalogue/category/books/art_25/index.html">
```

Art

Psychology

Autobiography

Parenting

Adult Fiction

Humor

Horror

History

Food and Drink

Christian Fiction

```
</li>
<li>
<a href="catalogue/category/books/business_35/index.html">

Business

</a>

</li>
<li>
<a href="catalogue/category/books/biography_36/index.html">

Biography

</a>

</li>
<li>
<a href="catalogue/category/books/thriller_37/index.html">

Thriller

</a>

</li>
<li>
<a href="catalogue/category/books/contemporary_38/index.html">

Contemporary

</a>

</li>
<li>
<a href="catalogue/category/books/spirituality_39/index.html">

Spirituality

</a>

</li>
<li>
<a href="catalogue/category/books/academic_40/index.html">

Academic

</a>

</li>
<li>
<a href="catalogue/category/books/self-help_41/index.html">

Self Help

</a>

</li>
<li>
<a href="catalogue/category/books/historical_42/index.html">

Historical

</a>

</li>
<li>
<a href="catalogue/category/books/christian_43/index.html">

Christian

</a>

</li>
<li>
```

```
<a href="catalogue/category/books/suspense_44/index.html">

    Suspense

</a>

</li>
<li>
<a href="catalogue/category/books/short-stories_45/index.html">

    Short Stories

</a>

</li>
<li>
<a href="catalogue/category/books/novels_46/index.html">

    Novels

</a>

</li>
<li>
<a href="catalogue/category/books/health_47/index.html">

    Health

</a>

</li>
<li>
<a href="catalogue/category/books/politics_48/index.html">

    Politics

</a>

</li>
<li>
<a href="catalogue/category/books/cultural_49/index.html">

    Cultural

</a>

</li>
<li>
<a href="catalogue/category/books/erotica_50/index.html">

    Erotica

</a>

</li>
<li>
<a href="catalogue/category/books/crime_51/index.html">

    Crime

</a>

</li>
</ul></li>
</ul>
</div>
</aside>
<div class="col-sm-8 col-md-9">
<div class="page-header action">
<h1>All products</h1>
</div>
<div id="messages">
</div>
<div id="promotions">
```

```

</div>
<form class="form-horizontal" method="get">
<div style="display:none">
</div>
<strong>1000</strong> results - showing <strong>1</strong> to <strong>20</strong>.

    </form>
<section>
<div class="alert alert-warning" role="alert"><strong>Warning!</strong> This is a demo website for web scraping purposes. Prices and ratings here were randomly assigned and have no real meaning.</div>
<div>
<ol class="row">
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/a-light-in-the-attic_1000/index.html"></a>
</div>
<p class="star-rating Three">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/a-light-in-the-attic_1000/index.html" title="A Light in the Attic">A Light in the ...</a></h3>
<div class="product_price">
<p class="price_color">£51.77</p>
<p class="instock availability">
<i class="icon-ok"></i>

        In stock

    </p>
</form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/tipping-the-velvet_999/index.html"></a>
</div>
<p class="star-rating One">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/tipping-the-velvet_999/index.html" title="Tipping the Velvet">Tipping the Velvet</a></h3>
<div class="product_price">
<p class="price_color">£53.74</p>
<p class="instock availability">
<i class="icon-ok"></i>

```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/soumission_998/index.html"><img alt="Soumission" class="thumbnail" sr
c="media/cache/3e/ef/3eef99c9d9adef34639f510662022830.jpg"/></a>
</div>
<p class="star-rating One">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/soumission_998/index.html" title="Soumission">Soumission</a></h3>
<div class="product_price">
<p class="price_color">£50.10</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/sharp-objects_997/index.html"></a>
</div>
<p class="star-rating Four">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/sharp-objects_997/index.html" title="Sharp Objects">Sharp Objects
</a></h3>
<div class="product_price">
<p class="price_color">£47.82</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
```

```
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/sapiens-a-brief-history-of-humankind_996/index.html"></a>
</div>
<p class="star-rating Five">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/sapiens-a-brief-history-of-humankind_996/index.html" title="Sapie
ns: A Brief History of Humankind">Sapiens: A Brief History ...</a></h3>
<div class="product_price">
<p class="price_color">£54.23</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/the-requiem-red_995/index.html"></a>
</div>
<p class="star-rating One">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/the-requiem-red_995/index.html" title="The Requiem Red">The Requi
em Red</a></h3>
<div class="product_price">
<p class="price_color">£22.65</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
```



```
<div class="image_container">
<a href="catalogue/the-dirty-little-secrets-of-getting-your-dream-job_994/index.html"><i
mg alt="The Dirty Little Secrets of Getting Your Dream Job" class="thumbnail" src="medi
a/cache/92/27/92274a95b7c251fea59a2b8a78275ab4.jpg"/></a>
</div>
<p class="star-rating Four">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/the-dirty-little-secrets-of-getting-your-dream-job_994/index.htm
l" title="The Dirty Little Secrets of Getting Your Dream Job">The Dirty Little Secrets
...</a></h3>
<div class="product_price">
<p class="price_color">£33.34</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/the-coming-woman-a-novel-based-on-the-life-of-the-infamous-feminist-v
ictoria-woodhull_993/index.html"></a>
</div>
<p class="star-rating Three">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/the-coming-woman-a-novel-based-on-the-life-of-the-infamous-femini
st-victoria-woodhull_993/index.html" title="The Coming Woman: A Novel Based on the Life
of the Infamous Feminist, Victoria Woodhull">The Coming Woman: A ...</a></h3>
<div class="product_price">
<p class="price_color">£17.93</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
```

```
<a href="catalogue/the-boys-in-the-boat-nine-americans-and-their-epic-quest-for-gold-at-
the-1936-berlin-olympics_992/index.html"></a>
</div>
<p class="star-rating Four">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/the-boys-in-the-boat-nine-americans-and-their-epic-quest-for-gold
-at-the-1936-berlin-olympics_992/index.html" title="The Boys in the Boat: Nine Americans
and Their Epic Quest for Gold at the 1936 Berlin Olympics">The Boys in the ...</a></h3>
<div class="product_price">
<p class="price_color">£22.60</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/the-black-maria_991/index.html"></a>
</div>
<p class="star-rating One">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/the-black-maria_991/index.html" title="The Black Maria">The Black
Maria</a></h3>
<div class="product_price">
<p class="price_color">£52.15</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/starving-hearts-triangular-trade-trilogy-1_990/index.html"></a>
```

```
</div>
<p class="star-rating Two">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/starving-hearts-triangular-trade-trilogy-1_990/index.html" title="Starving Hearts (Triangular Trade Trilogy, #1)">Starving Hearts (Triangular Trade ...</a></h3>
<div class="product_price">
<p class="price_color">£13.99</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/shakespeares-sonnets_989/index.html"></a>
</div>
<p class="star-rating Four">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/shakespeares-sonnets_989/index.html" title="Shakespeare's Sonnets">Shakespeare's Sonnets</a></h3>
<div class="product_price">
<p class="price_color">£20.66</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/set-me-free_988/index.html"></a>
</div>
<p class="star-rating Five">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
```



```
<h3><a href="catalogue/rip-it-up-and-start-again_986/index.html" title="Rip it Up and St
art Again">Rip it Up and ...</a></h3>
<div class="product_price">
<p class="price_color">£35.02</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/our-band-could-be-your-life-scenes-from-the-american-indie-undergroun
d-1981-1991_985/index.html"></a>
</div>
<p class="star-rating Three">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/our-band-could-be-your-life-scenes-from-the-american-indie-underg
round-1981-1991_985/index.html" title="Our Band Could Be Your Life: Scenes from the Ameri
can Indie Underground, 1981-1991">Our Band Could Be ...</a></h3>
<div class="product_price">
<p class="price_color">£57.25</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/olio_984/index.html"></a>
</div>
<p class="star-rating One">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/olio_984/index.html" title="Olio">Olio</a></h3>
<div class="product_price">
<p class="price_color">£23.88</p>
```

<p class="instock availability">
<i class="icon-ok"></i>

In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>
</article>

<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">

</div>
<p class="star-rating One">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3>Mesaerion: The Best Science ...</h3>
<div class="product_price">
<p class="price_color">£37.59</p>
<p class="instock availability">
<i class="icon-ok"></i>

In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>
</article>

<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">

</div>
<p class="star-rating Two">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3>Libertarianism for Beginners</h3>
<div class="product_price">
<p class="price_color">£51.33</p>
<p class="instock availability">
<i class="icon-ok"></i>

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
<li class="col-xs-6 col-sm-4 col-md-3 col-lg-3">
<article class="product_pod">
<div class="image_container">
<a href="catalogue/its-only-the-himalayas_981/index.html"></a
>
</div>
<p class="star-rating Two">
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
<i class="icon-star"></i>
</p>
<h3><a href="catalogue/its-only-the-himalayas_981/index.html" title="It's Only the Himal
ayas">It's Only the Himalayas</a></h3>
<div class="product_price">
<p class="price_color">£45.17</p>
<p class="instock availability">
<i class="icon-ok"></i>
```

In stock

```
</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Ad
d to basket</button>
</form>
</div>
</article>
</li>
</ol>
<div>
<ul class="pager">
<li class="current">
```

Page 1 of 50

```
</li>
<li class="next"><a href="catalogue/page-2.html">next</a></li>
</ul>
</div>
</div>
</section>
</div>
</div><!-- /row -->
</div><!-- /page_inner -->
</div><!-- /container-fluid -->
<footer class="footer container-fluid">
</footer>
<!-- jQuery -->
<script src="http://ajax.googleapis.com/ajax/libs/jquery/1.9.1/jquery.min.js"></script>
<script>window.jQuery || document.write('<script src="static/oscar/js/jquery/jquery-1.9.
1.min.js"><\script>')</script>
<!-- Twitter Bootstrap -->
<script src="static/oscar/js/bootstrap3/bootstrap.min.js" type="text/javascript"></scrip
```

```

t>
<!-- Oscar -->
<script charset="utf-8" src="static/oscar/js/oscar/ui.js" type="text/javascript"></scrip
t>
<script charset="utf-8" src="static/oscar/js/bootstrap-datetimepicker/bootstrap-datetim
e-picker.js" type="text/javascript"></script>
<script charset="utf-8" src="static/oscar/js/bootstrap-datetimepicker/locales/bootstrap-
datetimepicker.all.js" type="text/javascript"></script>
<script type="text/javascript">
    $(function() {

        oscar.init();

        oscar.search.init();

    });
</script>
<!-- Version: N/A -->
</body>
</html>

```

Lets explore the soup a bit

In [7]: `soup.title`

Out[7]: `<title>`
All products | Books to Scrape - Sandbox
`</title>`

In [8]: `soup.find('title')`

Out[8]: `<title>`
All products | Books to Scrape - Sandbox
`</title>`

In [9]: `soup.title.string`

Out[9]: `'\n All products | Books to Scrape - Sandbox\n'`

In [10]: `soup.title.text`

Out[10]: `'\n All products | Books to Scrape - Sandbox\n'`

In [11]: `soup.title.string.strip()`

Out[11]: `'All products | Books to Scrape - Sandbox'`

In [17]: `soup.body.h1`

Out[17]: `<h1>All products</h1>`

First book title :

In [19]: `soup.article.h3.a`

Out[19]: `A
Light in the ...`

In [20]: `soup.article.h3.a.text`

`'A Light in the ...'`

Out[20]:

```
In [21]: ##### but the text is cut !!!
```

```
In [22]: soup.article.h3.a["title"]
```

Out[22]: 'A Light in the Attic'

```
In [23]: type(soup.article.h3.a["title"])
```

Out[23]: str

Explore all books in the same time :

```
In [24]: books = soup.find_all("article", class_ = "product_pod")
```

```
In [26]: for book in books:
          print(book.h3.a["title"])
```

A Light in the Attic
Tipping the Velvet
Soumission
Sharp Objects
Sapiens: A Brief History of Humankind
The Requiem Red
The Dirty Little Secrets of Getting Your Dream Job
The Coming Woman: A Novel Based on the Life of the Infamous Feminist, Victoria Woodhull
The Boys in the Boat: Nine Americans and Their Epic Quest for Gold at the 1936 Berlin Olympics
The Black Maria
Starving Hearts (Triangular Trade Trilogy, #1)
Shakespeare's Sonnets
Set Me Free
Scott Pilgrim's Precious Little Life (Scott Pilgrim #1)
Rip it Up and Start Again
Our Band Could Be Your Life: Scenes from the American Indie Underground, 1981-1991
Olio
Mesaerion: The Best Science Fiction Stories 1800-1849
Libertarianism for Beginners
It's Only the Himalayas

```
In [29]: ##### Lets explore more
```

```
In [30]: soup.select("div")[0]
```

Out[30]: <div class="page_inner">
<div class="row">
<div class="col-sm-8 h1">Books to Scrape<small> We love being scraped!</small>
</div>
</div>
</div>

```
In [31]: soup.select(".product_price")
```

Out[31]: [<div class="product_price">
<p class="price_color">£51.77</p>
<p class="instock availability">
<i class="icon-ok"></i>

In stock

</p>

```
<form>
  <button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
  <p class="price_color">£53.74</p>
  <p class="instock availability">
    <i class="icon-ok"></i>
```

In stock

```
</p>
<form>
  <button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
  <p class="price_color">£50.10</p>
  <p class="instock availability">
    <i class="icon-ok"></i>
```

In stock

```
</p>
<form>
  <button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
  <p class="price_color">£47.82</p>
  <p class="instock availability">
    <i class="icon-ok"></i>
```

In stock

```
</p>
<form>
  <button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
  <p class="price_color">£54.23</p>
  <p class="instock availability">
    <i class="icon-ok"></i>
```

In stock

```
</p>
<form>
  <button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
  <p class="price_color">£22.65</p>
  <p class="instock availability">
    <i class="icon-ok"></i>
```

In stock

```
</p>
<form>
```

```
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£33.34</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£17.93</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£22.60</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£52.15</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£13.99</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>
```

```
dd to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£20.66</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add
dd to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£17.46</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add
dd to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£52.29</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add
dd to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£35.02</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add
dd to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£57.25</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add
dd to basket</button>
```

```

</form>
</div>,
<div class="product_price">
<p class="price_color">£23.88</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£37.59</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£51.33</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>,
<div class="product_price">
<p class="price_color">£45.17</p>
<p class="instock availability">
<i class="icon-ok"></i>

    In stock

</p>
<form>
<button class="btn btn-primary btn-block" data-loading-text="Adding..." type="submit">Add to basket</button>
</form>
</div>]

```

```
In [34]: len(soup.select(".product_price"))
```

```
Out[34]: 20
```

```
In [35]: len(books)
```

```
Out[35]: 20
```

Lets scrape books info and make it a dataframe

```
In [37]: titles = []

In [38]: ratings = []

In [39]: prices = []

In [52]: books_dict = { 'Title': [], 'Price': [], 'Rating': [] }
ratings = {'One': 1, 'Two': 2, 'Three': 3, 'Four': 4, 'Five': 5}

In [40]: books = soup.find_all("article", class_ = "product_pod")

In [41]: books[0].find(class_ = "price_color").string.strip('£')

Out[41]: '51.77'

In [45]: books[0].find(class_ = "star-rating").attrs['class'][1]

Out[45]: 'Three'
```

```
In [ ]: for book in books:
        # Find the title and price
        title.append(book.h3.a["title"])
        prices.append(float(book.find(class_ = "price_color").string.strip('£')))

        # Find the star rating and user the mapping to convert it to numbers
        stars_html = book.find(class_ = "star-rating")
        ratings.append(ratings.get(stars_html.attrs['class'][1], 0))

In [53]: for book_html in soup.find_all(class_ = "product_pod"):
        # Find the title and price
        books_dict['Title'].append(book_html.find("h3").find("a").string)
        books_dict['Price'].append(float(book_html.find(class_ = "price_color").string.s

        # Find the star rating and user the mapping to convert it to numbers
        stars_html = book_html.find(class_ = "star-rating")
        books_dict['Rating'].append(ratings.get(stars_html.attrs['class'][1], 0))
```

```
In [54]: pd.DataFrame.from_dict(books_dict)
```

Out[54]:

	Title	Price	Rating
0	A Light in the ...	51.77	3
1	Tipping the Velvet	53.74	1
2	Soumission	50.10	1
3	Sharp Objects	47.82	4
4	Sapiens: A Brief History ...	54.23	5
5	The Requiem Red	22.65	1
6	The Dirty Little Secrets ...	33.34	4
7	The Coming Woman: A ...	17.93	3
8	The Boys in the ...	22.60	4
9	The Black Maria	52.15	1
10	Starving Hearts (Triangular Trade ...	13.99	2
11	Shakespeare's Sonnets	20.66	4

12	Set Me Free	17.46	5
13	Scott Pilgrim's Precious Little ...	52.29	5
14	Rip it Up and ...	35.02	5
15	Our Band Could Be ...	57.25	3
16	Olio	23.88	1
17	Mesaerion: The Best Science ...	37.59	1
18	Libertarianism for Beginners	51.33	2
19	It's Only the Himalayas	45.17	2

```
In [55]: tableau = pd.DataFrame.from_dict(books_dict)
```

```
In [57]: tableau.head()
```

```
Out[57]:
```

	Title	Price	Rating
0	A Light in the ...	51.77	3
1	Tipping the Velvet	53.74	1
2	Soumission	50.10	1
3	Sharp Objects	47.82	4
4	Sapiens: A Brief History ...	54.23	5

```
In [58]: tableau.head(10)
```

```
Out[58]:
```

	Title	Price	Rating
0	A Light in the ...	51.77	3
1	Tipping the Velvet	53.74	1
2	Soumission	50.10	1
3	Sharp Objects	47.82	4
4	Sapiens: A Brief History ...	54.23	5
5	The Requiem Red	22.65	1
6	The Dirty Little Secrets ...	33.34	4
7	The Coming Woman: A ...	17.93	3
8	The Boys in the ...	22.60	4
9	The Black Maria	52.15	1

```
In [59]: tableau.tail(10)
```

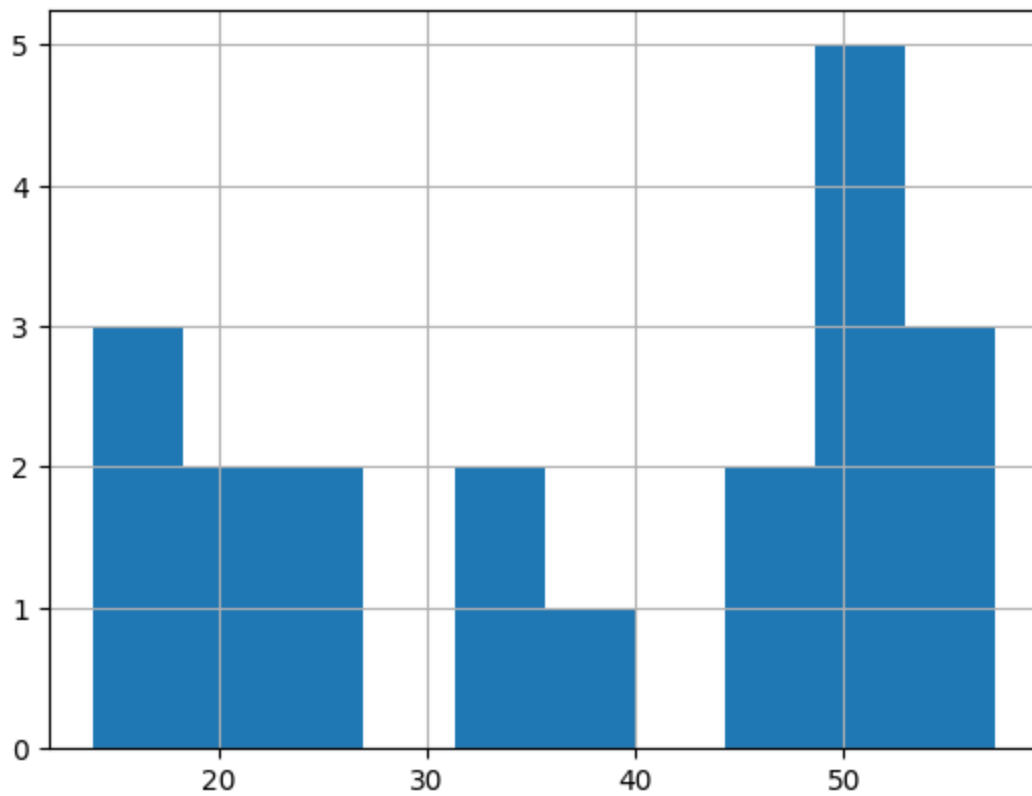
```
Out[59]:
```

	Title	Price	Rating
10	Starving Hearts (Triangular Trade ...	13.99	2
11	Shakespeare's Sonnets	20.66	4
12	Set Me Free	17.46	5
13	Scott Pilgrim's Precious Little ...	52.29	5
14	Rip it Up and ...	35.02	5

15	Our Band Could Be ...	57.25	3
16	Olio	23.88	1
17	Mesaerion: The Best Science ...	37.59	1
18	Libertarianism for Beginners	51.33	2
19	It's Only the Himalayas	45.17	2

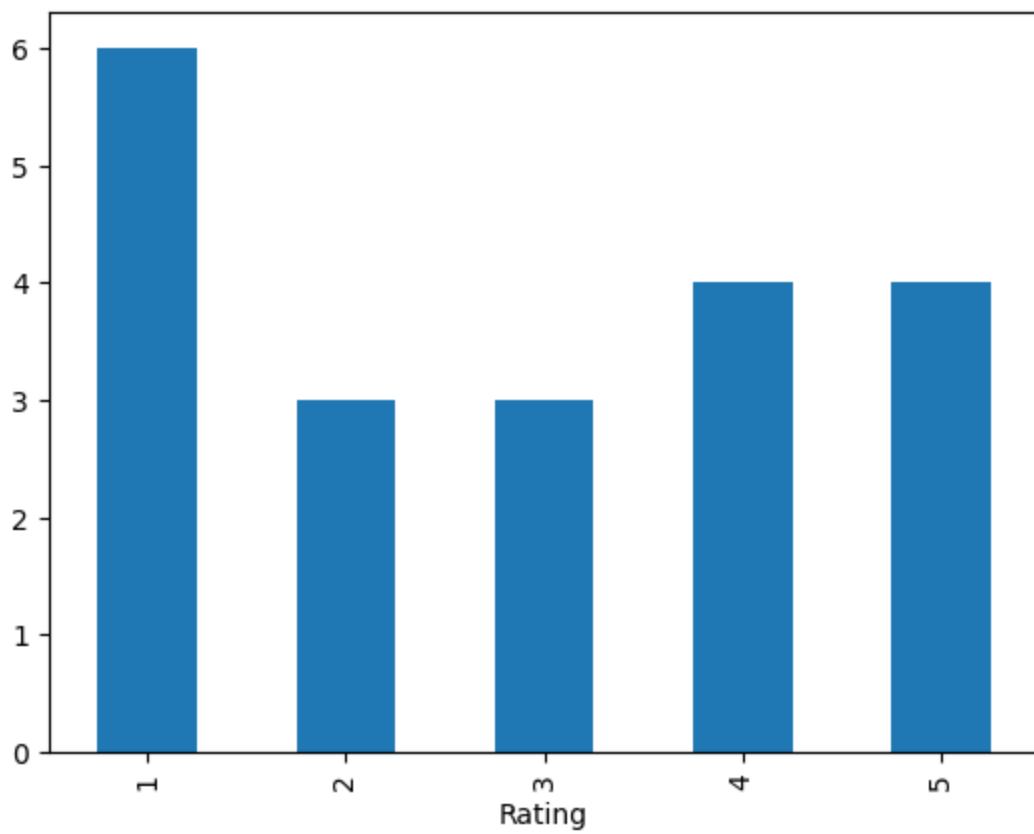
In [60]: `tableau['Price'].hist()`

Out[60]: `<AxesSubplot:>`



In [62]: `tableau.groupby("Rating").count()["Title"].plot(kind="bar")`

Out[62]: `<AxesSubplot:xlabel='Rating'>`



```
In [63]: tableau.to_csv("books.csv")
```

```
In [ ]:
```