

```
In [1]: import pandas as pd
```

```
In [2]: df = pd.read_csv('BL-Flickr-Images-Book.csv')
df.head()
```

```
Out[2]:
```

	Identifier	Edition Statement	Place of Publication	Date of Publication	Publisher	Title	Author	Contributor
0	206	NaN	London	1879 [1878]	S. Tinsley & Co.	Walter Forbes. [A novel.] By A. A.	A. A.	FORE Wa
1	216	NaN	London; Virtue & Yorston	1868	Virtue & Co.	All for Greed. [A novel. The dedication signed...	A., A. A.	BLAZE BURY, M Pauline F - Baror
2	218	NaN	London	1869	Bradbury, Evans & Co.	Love the Avenger. By the author of "All for Gr...	A., A. A.	BLAZE BURY, M Pauline F - Baror
3	472	NaN	London	1851	James Darling	Welsh Sketches, chiefly ecclesiastical, to the...	A., E. S.	Appley Er Silva
4	480	A new edition, revised, etc.	London	1857	Wertheim & Macintosh	[The World in which I live, and my place in it...	A., E. S.	BROO John He

```
In [3]: df.isnull().sum()
```

```
Out[3]:
```

Identifier	0
Edition Statement	7514
Place of Publication	0
Date of Publication	181
Publisher	4195
Title	0
Author	1778
Contributors	0
Corporate Author	8287
Corporate Contributors	8287
Former owner	8286
Engraver	8287
Issuance type	0
Flickr URL	0
Shelfmarks	0
dtype:	int64

```
In [8]: df.dropna(axis=1, inplace = True)
df.head()
```

Out [8]:

	Identifier	Place of Publication	Title	Contributors	Issuance type	
0	206	London	Walter Forbes. [A novel.] By A. A	FORBES, WALTER.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
1	216	London; Virtue & Yorston	All for Greed. [A novel. The dedication signed...	BLAZE DE BURY, MARIE PAULINE ROSE - BARONESS	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
2	218	London	Love the Avenger. By the author of "All for Gr...	BLAZE DE BURY, MARIE PAULINE ROSE - BARONESS	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
3	472	London	Welsh Sketches, chiefly ecclesiastical, to the...	APPLEYARD, ERNEST SILVANUS.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
4	480	London	[The World in which I live, and my place in it...	BROOME, JOHN HENRY.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>

In [5]: `df.duplicated().sum()`

Out[5]: 0

In [6]: `df['Flickr URL'] = df['Flickr URL'].str.replace("http", "https")  
df.head()`

Out [6]:

	Identifier	Place of Publication	Title	Contributors	Issuance type	
0	206	London	Walter Forbes. [A novel.] By A. A	FORBES, Walter.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
1	216	London; Virtue & Yorston	All for Greed. [A novel. The dedication signed...	BLAZE DE BURY, Marie Pauline Rose - Baroness	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
2	218	London	Love the Avenger. By the author of "All for Gr...	BLAZE DE BURY, Marie Pauline Rose - Baroness	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
3	472	London	Welsh Sketches, chiefly ecclesiastical, to the...	Appleyard, Ernest Silvanus.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
4	480	London	[The World in which I live, and my place in it...	BROOME, John Henry.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>

```
In [7]: df['Contributors'] = df['Contributors'].str.upper()  
df.head()
```

```
Out[7]:
```

	Identifier	Place of Publication	Title	Contributors	Issuance type	
0	206	London	Walter Forbes. [A novel.] By A. A	FORBES, WALTER.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
1	216	London; Virtue & Yorston	All for Greed. [A novel. The dedication signed...	BLAZE DE BURY, MARIE PAULINE ROSE - BARONESS	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
2	218	London	Love the Avenger. By the author of "All for Gr...	BLAZE DE BURY, MARIE PAULINE ROSE - BARONESS	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
3	472	London	Welsh Sketches, chiefly ecclesiastical, to the...	APPLEYARD, ERNEST SILVANUS.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>
4	480	London	[The World in which I live, and my place in it...	BROOME, JOHN HENRY.	monographic	<a href="https://www.flickr.com/photos/...">https://www.flickr.com/photos/...</a>

```
In [ ]:
```