```
import glob
import pandas as pd

extension = 'csv'
all_filenames = sorted([i for i in glob.glob('datasets/spotify_artists/*.{}'.format(exte
    # combine all files in the list
    combined_csv = pd.concat([pd.read_csv(f) for f in all_filenames])
    combined_csv.drop(combined_csv.columns[combined_csv.columns.str.contains('unnamed', case
    # display
    print ("Number of Columns before data cleansing: %d"%len(combined_csv.columns))
    print ("Number of rows before cleansing: %d"%combined_csv.title.count())
    combined_csv.describe()
    display(combined_csv)
```

Number of Columns after data cleansing: 3 Number of rows after cleansing: 2653

	title	all_artists	popularity
0	Rowboat	Johnny Cash	26
1	Better Days - Single Edit	Bruce Springsteen	38
2	Contigo	Enrique Iglesias	38
3	Technologic - Vitalic Remix	Daft Punk	20
4	A cause	Céline Dion	25
•••			
92	More Than Just Friends	Mariah Carey	25
93	Make a Mistake	Brad Paisley	23
94	Night Train	James Brown	45
95	Grown so Ugly	The Black Keys	34
96	Christmas Lullaby	Mannheim Steamroller	8

2653 rows × 3 columns

```
In [2]: combined_csv.rename(columns={'title':'title_spoty'}, inplace=True)

In [3]: #drop repeated (title, artist)
    combined_csv.drop_duplicates(subset = ['title_spoty', 'all_artists'], keep = 'first', inp
    # display
    print ("Number of Columns after data cleansing: %d"%len(combined_csv.columns))
    print ("Number of rows after cleansing: %d"%combined_csv.title_spoty.count())
    combined_csv.describe()
```

Number of Columns after data cleansing: 3 Number of rows after cleansing: 2443

Out [3]: popularity count 2443.000000

 mean
 32.145722

 std
 19.296451

 min
 0.000000

 25%
 19.000000

 50%
 32.000000

```
max
                 86.000000
         combined csv['index'] = range(1, len(combined csv) + 1)
In [4]:
        combined_csv.describe()
In [5]:
                                index
Out[5]:
                 popularity
         count 2443.000000 2443.000000
         mean
                 32.145722 1222.000000
                 19.296451 705.377677
          std
                0.000000 1.000000
          min
```

75%

25%

50%

75%

max

46.000000

19.000000 611.500000

32.000000 1222.000000

46.000000 1832.500000

86.000000 2443.000000

```
In [6]: # export to csv
combined_csv.to_csv("spotify_combined.csv", index=False, encoding='utf-8-sig')
```