paper: 297 x 210 mm, cards: 91 x 59 mm

(Not yet) 100 pandas exercises

This is a collection of exercises that have been collected by condensing various sources like project source code and the available documentation on pandas. The goal of this collection is to offer a quick reference for both old and new users but also to provide a set of exercices for those who teach.

If you want to suggest another exercise or find an error or think you've a better way to solve some of them, feel free to open an issue or pull request at https://github.com/deeplook/pandas-100

Question:

1. Import the pandas package under the name `pd` (★☆☆)

Question:

2. Print the pandas version and a versions list of all package dependancies of pandas (★☆☆)

Question:

3. Read a HTML table on a webpage like http://www.lenntech.com/periodic-chart-elements/melting-point.htm into a dataframe (★☆☆)

Question:

50. Read a CSV file into a dataframe like the tables on https://www.ssa.gov/oact/babynames/limits.html (★☆☆)

Question:

51. Create a new column in a data frame with the same value in all rows (★☆☆)

Question:

52. Merge a list of dataframes into one (★★☆)

Question:

53. Filter by one column (★★☆)

Question:

54. Select one column of a dataframe (★☆☆)

Answer 2:

```
print(pd.__version__)
pd.show_versions()
```

Answer 1:

```
import pandas as pd
```

Answer 5:

```
df['year'] = 2017
```

Answer 4:

```
df = pd.read_csv(fn, names=['name', 'gender',
                            'count'])
```

Answer 3:

```
basic = 'http://www.lenntech.com'
path = '/periodic-chart-elements/melting-point.htm'
df = pd.read_html(basic + path)
```

Answer 8:

```
names = df['name']
```

Answer 7:

```
girls = df[df['gender'] == 'F']
```

Answer 6:

```
df_list = [df1, df2, df3]
df = pd.concat(df_list)
```

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Question:

55. Select two columns of a dataframe (★★☆)

Question:

56. Use a column as index (★★☆)

Question:

57. Select every 20th entry of a dataframe (★☆☆)

Question:

58. Show summary of a dataframe (★☆☆)

Question:

59. Show all values in one column and how often they occur (★☆☆)

Question:

70. Turn a column to upper case (★★☆)

Question:

71. Sum up values of one column grouped by another (★★☆)

Question:

72. TODO melt a dataframe?? (★★☆)

Question:

73. Remove column from a dataframe CHECK (★☆☆)

Answer 11:

```
df = df[::20]
```

Answer 10:

```
by_year = df.set_index('year')
```

Answer 9:

```
names = df[['name', 'year']]
```

Answer 14:

```
def upper(s): return s.upper()

up = df['name'].apply(upper)
```

Answer 13:

```
df.values_counts()
```

Answer 12:

```
df.describe()
```

Answer 17:

```
df.drop('name')
```

Answer 16:

```
pd.melt
```

Answer 15:

```
groups = names.groupby('name')['count'].apply(sum)
```

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Question: 80. Plot a dataframe (★★★)	Question: 99. //Add your suggested question including rating here// (★☆☆)

Answer 19:

```
# Author:

# your code...
```

Answer 18:

```
import matplotlib.pyplot as plt
madonna = df[df['name'] == 'Madonna']
madonna = madonna.set_index('year')
madonna.plot()
plt.show()
```