

```
In [203]: import pandas as pd
import numpy as np
import re
import os
```

```
In [204]: os.listdir("C:/Users/jctep/OneDrive/Documents/GitHub/text-mining-computer-vision/
files = os.listdir("C:/Users/jctep/OneDrive/Documents/GitHub/text-mining-computer
```

```
In [205]: data = pd.read_csv(str("Datos/"+files[0]), sep=" ", header=None, index_col=None)
data.head()
```

Out[205]:

| | 0 |
|---|------------|
| 0 | 23/02/2017 |
| 1 | 21/11/2016 |
| 2 | 12/02/2017 |
| 3 | 06/06/2016 |
| 4 | 04/05/2018 |

```
In [34]: str("Datos/"+files[0])
```

Out[34]: 'Datos/D1.txt'

```
In [54]: li = []
for filename in files:
    df = pd.read_csv(str("Datos/"+filename), index_col = None, header = None)
    li.append(df)

data = pd.concat(li, axis = 0, ignore_index = True)
data.columns = ['raw_date']
```

```
In [55]: len(data)
```

Out[55]: 21000

```
In [117]: data.head()
```

Out[117]:

| | raw_date |
|---|------------|
| 0 | 23/02/2017 |
| 1 | 21/11/2016 |
| 2 | 12/02/2017 |
| 3 | 06/06/2016 |
| 4 | 04/05/2018 |

```
In [197]: data.raw_date = data.raw_date.replace(regex=r'[Jj]an', value='01')
data.raw_date = data.raw_date.replace(regex=r'[Ff]eb', value='02')
data.raw_date = data.raw_date.replace(regex=r'[Mm]ar', value='03')
data.raw_date = data.raw_date.replace(regex=r'[Aa]pr', value='04')
data.raw_date = data.raw_date.replace(regex=r'[Mm]ay', value='05')
data.raw_date = data.raw_date.replace(regex=r'[Jj]un', value='06')
data.raw_date = data.raw_date.replace(regex=r'[Jj]ul', value='07')
data.raw_date = data.raw_date.replace(regex=r'[Aa]ug', value='08')
data.raw_date = data.raw_date.replace(regex=r'[Ss]ep', value='09')
data.raw_date = data.raw_date.replace(regex=r'[Oo]ct', value='10')
data.raw_date = data.raw_date.replace(regex=r'[Nn]ov', value='11')
data.raw_date = data.raw_date.replace(regex=r'[Dd]ec', value='12')
data.raw_date = data.raw_date.str.replace('.', '/')
data.raw_date = data.raw_date.str.replace('-', '/')
```

```
In [198]: df= data.raw_date.str.split('/',expand= True)
```

```
In [199]: df.columns = ['day', 'month', 'year']
```

```
In [200]: df.to_csv('fulldata.csv',index=None)
```

```
In [206]: df['day'].astype(int).mean()
df['month'].astype(int).mean()
df['year'].astype(int).mean()
```

Out[206]: 2016.6869047619048

```
In [210]: df['day'] = df['day'].astype(int)
df['month'] = df['month'].astype(int)
df['year'] = df['year'].astype(int)
```

```
In [211]: df.describe()
```

Out[211]:

| | day | month | year |
|-------|--------------|--------------|--------------|
| count | 21000.000000 | 21000.000000 | 21000.000000 |
| mean | 15.624762 | 6.466476 | 2016.686905 |
| std | 8.782500 | 3.468418 | 1.441601 |
| min | 1.000000 | 1.000000 | 2014.000000 |
| 25% | 8.000000 | 3.000000 | 2015.000000 |
| 50% | 16.000000 | 6.000000 | 2017.000000 |
| 75% | 23.000000 | 10.000000 | 2018.000000 |
| max | 31.000000 | 12.000000 | 2019.000000 |

In [212]: `df.mean()`

Out[212]:

| | |
|--------|-------------|
| day | 15.624762 |
| month | 6.466476 |
| year | 2016.686905 |
| dtype: | float64 |

In []: