

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

```
In [2]: N = 10
data = pd.DataFrame(np.random.uniform(1,9,(N,2)), columns=['A', 'B'])
data1 = data.copy()
data2 = data.copy()
%time data1 = data.query('A > 4')
%time data2 = data[data['A'] > 4]
```

CPU times: user 9.29 ms, sys: 3.84 ms, total: 13.1 ms
Wall time: 11.7 ms
CPU times: user 681 μ s, sys: 0 ns, total: 681 μ s
Wall time: 637 μ s

```
In [3]: N = 1000
data = pd.DataFrame(np.random.uniform(1,9,(N,2)), columns=['A', 'B'])
data1 = data.copy()
data2 = data.copy()
%time data1 = data.query('A > 4')
%time data2 = data[data['A'] > 4]
```

CPU times: user 988 μ s, sys: 2.53 ms, total: 3.52 ms
Wall time: 2.64 ms
CPU times: user 1.64 ms, sys: 0 ns, total: 1.64 ms
Wall time: 1.18 ms

```
In [4]: N = 100000
data = pd.DataFrame(np.random.uniform(1,9,(N,2)), columns=['A', 'B'])
data1 = data.copy()
data2 = data.copy()
%time data1 = data.query('A > 4')
%time data2 = data[data['A'] > 4]
```

CPU times: user 5.78 ms, sys: 2.95 ms, total: 8.73 ms
Wall time: 8.24 ms
CPU times: user 3.11 ms, sys: 781 μ s, total: 3.89 ms
Wall time: 3.45 ms

```
In [5]: N = 10000000
data = pd.DataFrame(np.random.uniform(1,9,(N,2)), columns=['A', 'B'])
data1 = data.copy()
data2 = data.copy()
%time data1 = data.query('A > 4')
%time data2 = data[data['A'] > 4]
```

CPU times: user 448 ms, sys: 416 ms, total: 864 ms
Wall time: 568 ms
CPU times: user 218 ms, sys: 173 ms, total: 391 ms
Wall time: 390 ms