

# **Pandas - Acting on Data**

```

import pandas as pd
import numpy as np

np.random.seed(0)
df2 = pd.DataFrame(np.random.randn(10,4), columns=['A', 'B', 'C', 'D'])

def style_negative(v, props=''):
    return props if v < 0 else None
s2 = df2.style.map(style_negative, props='color:red;')\
    .map(lambda v: 'opacity: 20%;' if (v < 0.3) and (v > -0.3) else
None)

def highlight_max(s, props=''):
    return np.where(s == np.nanmax(s.values), props, '')

# darkblue, pink
s2.apply(highlight_max, props='color:white;background-color:#00008b', axis=0)\
.apply(highlight_max, props='color:white;background-color: #ffc0cb;', axis=1)\
.apply(highlight_max, props='color:white;background-color:purple', axis=None)

```

	A	B	C	D
0	1.764052	0.400157	0.978738	2.240893
1	1.867558	-0.977278	0.950088	-0.151357
2	-0.103219	0.410599	0.144044	1.454274
3	0.761038	0.121675	0.443863	0.333674
4	1.494079	-0.205158	0.313068	-0.854096
5	-2.552990	0.653619	0.864436	-0.742165
6	2.269755	-1.454366	0.045759	-0.187184
7	1.532779	1.469359	0.154947	0.378163
8	-0.887786	-1.980796	-0.347912	0.156349
9	1.230291	1.202380	-0.387327	-0.302303