Aim: To execute pandas program to highlight the negative numbers red and positive numbers black

pseudo code:

* import libraries: Import pandas and numpy for handling the dataframe and generating random numbers
* create a DataFrame: use numpy to generate dataframe with 10 rows and 4 columns filled with random numbers
* Highlight negative numbers: Define a function to highlight negative numbers in black.
* Apply the style: use the style.applymap() function to apply the color scheme to the Dataframe

Sample input:

Dataframe of 10 rows and 4 columns of random values

Sample output:

	A	B	C	D
0	-1.10483	-0.4677	0.511641	0.768053
1	-0.021937	-0.2675	-1.86798	-0.099365
2	-0.5633	0.616273	0.947013	-1.672109
3	1.367833	0.078981	0.32690	0.443323
4	-1.262702	0.616273	0.4677	1.001556
5	-1.127010	-1.092081	0.616273	0.4677
6	1.96543	1.86521	1.864233	1.318550
7	-0.903416	-1.462862	0.768053	-0.695985
8	1.318550	1.96543	1.86521	1.864233
9	0.105461	-1.46349	1.864233	-0.202535

Result:

Therefore the pandas execution for highlighting negative & positive numbers executed sucessfully

program 10.py - C:/Users/abhip/OneDrive/Documents/DSA05 LAB/program 10.py (3.12.4)

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```
import pandas as pd
import numpy as np

# Create DataFrame with random values
df = pd.DataFrame(np.random.randn(10, 4))

# Function to highlight negative numbers
def highlight_negatives(s):
    return ['color: red' if v < 0 else 'color: black' for v in s]

# Apply the highlighting
df.style.apply(highlight_negatives)
print(df)
```

IDLE Shell 3.12.4

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```
          0         1         2         3
0  1.006827  0.876526 -0.701401  0.821812
1 -0.390457  1.572903  0.041000 -1.278588
2 -0.139542 -0.161318  0.228170 -0.628316
3  0.837607 -0.000669  0.219758  0.072653
4 -1.296886  0.017380  0.282212  1.595495
5  0.866897  0.186737  1.410269 -0.915463
6  1.022344 -0.247977 -0.452670 -1.696918
7 -0.331138  0.228933 -0.007982 -1.267470
8  0.745098  0.090340 -0.627080 -0.961841
9  0.883099 -1.063393 -1.857893 -0.579969
>>>
```

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