Experiment - 10

Aim: To execute pandas program to highlight negative numbers red & positive numbers black.

Pseudocode:

1) Import libraries: Import pandas & numpy for handling the dataframe & random numbers.

2) Use numpy to generate dataframe with 10 rows & 4 columns with random number.

3) Define a function to highlight negative numbers.

4) use style.applymap() to apply the color scheme to Dataframe.

Sample Input:

Dataframe of 4 rows & 4 columns of random val

Sample Output:

	A	B	C	D
0	-1.104834	-0.44076	0.511641	0.768053
1	-0.021437	-0.2375	-0.733501	-0.09
2	-0.563891	-0.616273	0.947013	0.320
3	0.367832	0.07691	0.32690	-0.14
4	-0.2678	-0.9651	0.23190	1.00

Result:

Therefore the pandas execution for positive numbers executed successfully.

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)
```

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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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