

Aim: To execute pandas program to set dataframe background color black and font colour yellow

pseudocode:

- 1. import libraries: Import the pandas and numpy libraries
- 2. create a dataframe: Generate a dataframe with 10 rows & 4 columns filled with random values.
- 3. Apply style: use the `style.set_properties()` function to set the background colour of df.

Sample input:

`df = pd.DataFrame(np.random.rand(10, 4), columns = ['A', 'B', 'C', 'D'])`

Sample output:

| | A | B | C | D |
|-----|---------|----------|----------|---------|
| 0 | 0.32230 | 0.38908 | 0.15774 | 0.8751 |
| 1 | 0.09089 | 0.521359 | 0.17649 | 0.44701 |
| 2 | 0.6294 | 0.826728 | 0.451875 | 0.41236 |
| ... | ... | ... | ... | ... |
| 9 | 0.6085 | 0.694075 | 0.72286 | 0.50680 |

Result:

This code has been successfully executed and got the final output.

```
import pandas as pd
import numpy as np

# Create a DataFrame with random values
data = np.random.randn(10, 4) # 10 rows, 4 columns
df = pd.DataFrame(data, columns=['A', 'B', 'C', 'D'])

# Set background color to black and font color to yellow
styled_df = df.style.set_properties(**{
    'background-color': 'black',
    'color': 'yellow'
})

# Display the styled DataFrame
styled_df
```

| | A | B | C | D |
|---|-----------|-----------|-----------|-----------|
| 0 | 1.542864 | -1.277625 | -0.782855 | 1.695680 |
| 1 | -2.183589 | -0.601970 | -1.259810 | -1.007858 |
| 2 | 1.273645 | 1.077657 | -1.526835 | 0.461373 |
| 3 | 1.639446 | 2.225757 | 0.881274 | 1.622134 |
| 4 | 0.540673 | 0.810141 | -1.075822 | 0.221236 |
| 5 | 0.103966 | 0.938950 | -0.884829 | -0.789898 |
| 6 | -0.459093 | -1.195202 | -0.946269 | -1.508790 |
| 7 | 1.064290 | 0.681748 | 0.068827 | -0.894372 |
| 8 | -1.628803 | -1.223865 | -2.527793 | -0.413719 |
| 9 | -0.600155 | -1.059039 | 0.890669 | -1.344156 |