Matplotlib 17_ Kustomisasi Matplotlib dengan Style Sheets

June 8, 2022

1 Matplotlib Customisation: Style Sheet

Dalam sesi ini kita akan mempelajari kustomisasi Matplotlib dengan Style Sheets.

1.1 1. Import Modules

[1]:
```
%matplotlib inline
```

[2]:
```
import matplotlib
import matplotlib.pyplot as plt
import numpy as np

print(matplotlib.__version__)
print(np.__version__)
```

```
3.3.4
1.20.1
```

1.2 2. Predefined Styles

Matplotlib menyediakan beberapa predefined styles.

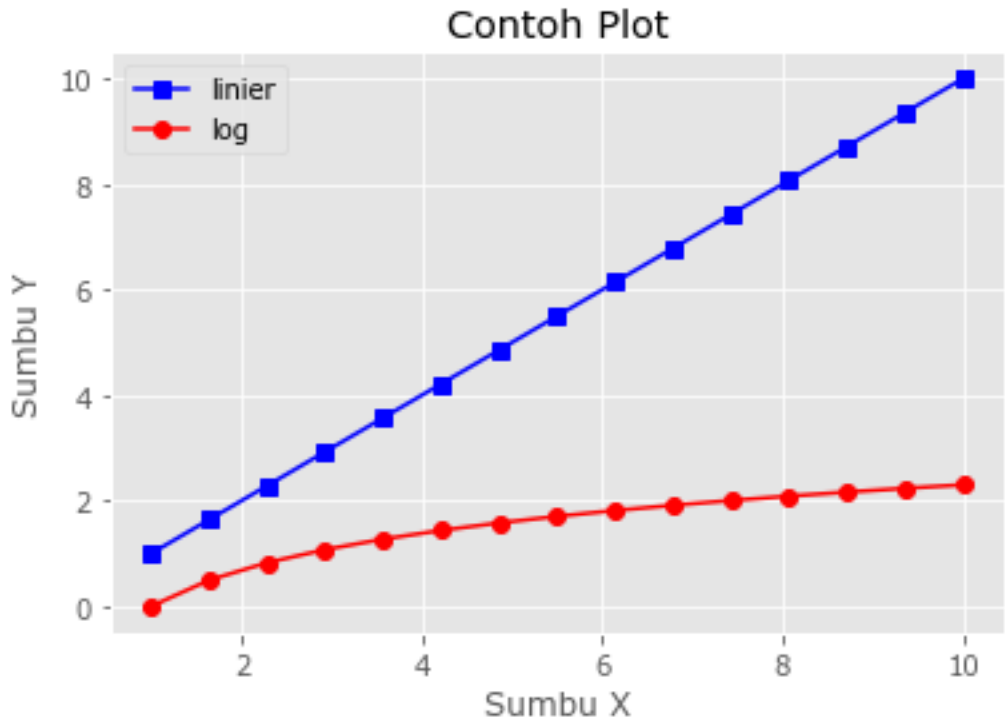
[3]:
```
plt.style.available
```

[3]:
```
['Solarize_Light2',
 '_classic_test_patch',
 'bmh',
 'classic',
 'dark_background',
 'fast',
 'fivethirtyeight',
 'ggplot',
 'grayscale',
 'seaborn',
 'seaborn-bright',
 'seaborn-colorblind',
 'seaborn-dark',
 'seaborn-dark-palette',
```

```
'seaborn-darkgrid',
'seaborn-deep',
'seaborn-muted',
'seaborn-notebook',
'seaborn-paper',
'seaborn-pastel',
'seaborn-poster',
'seaborn-talk',
'seaborn-ticks',
'seaborn-white',
'seaborn-whitegrid',
'tableau-colorblind10']
```

[4]:
```
plt.style.use('ggplot')
```

[5]:
```
x = np.linspace(1, 10, 15)

plt.plot(x, x, 'bs-', label = 'linier')
plt.plot(x, np.log(x), 'ro-', label = 'log')

plt.legend()
plt.xlabel('Sumbu X')
plt.ylabel('Sumbu Y')
plt.title('Contoh Plot')

plt.show()
```



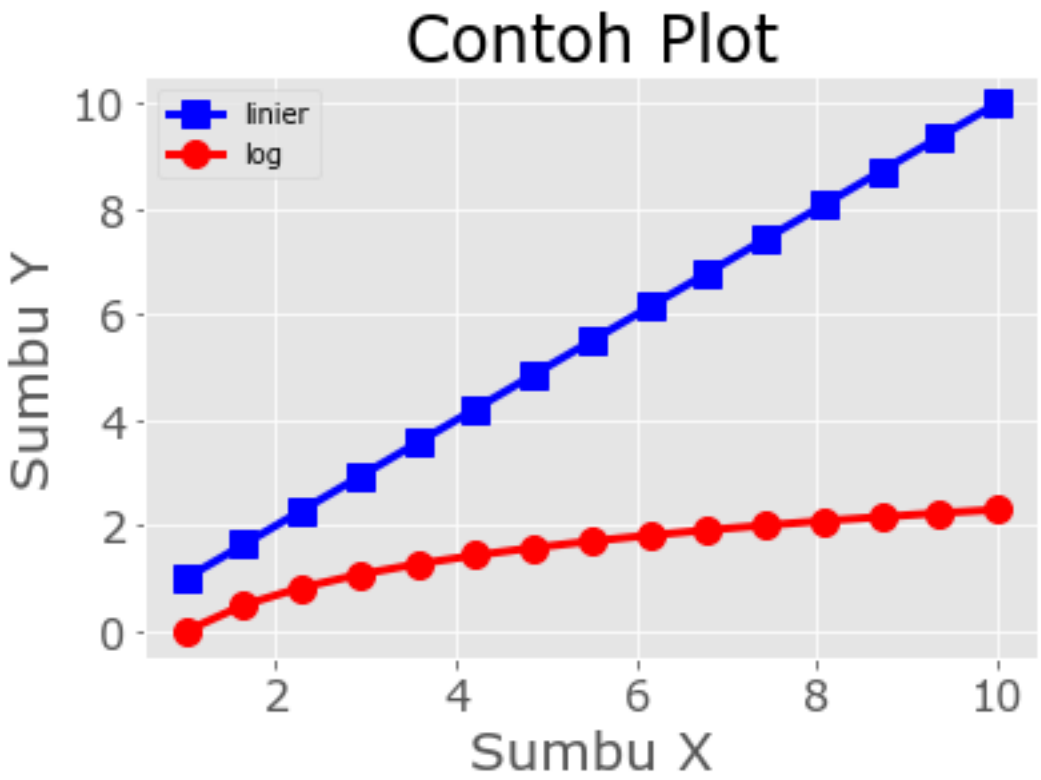
1.3 3. Membuat Style Sendiri

Buat file .txt melalui homepage jupyter notebook dengan penulisan seperti dibawah ini:

```
axes.titlesize : 24
axes.labelsize : 20
lines.linewidth : 3
lines.markersize : 10
xtick.labelsize : 16
ytick.labelsize : 16
```

[6]:
```
plt.style.use('./style_ku.mplstyle')
```

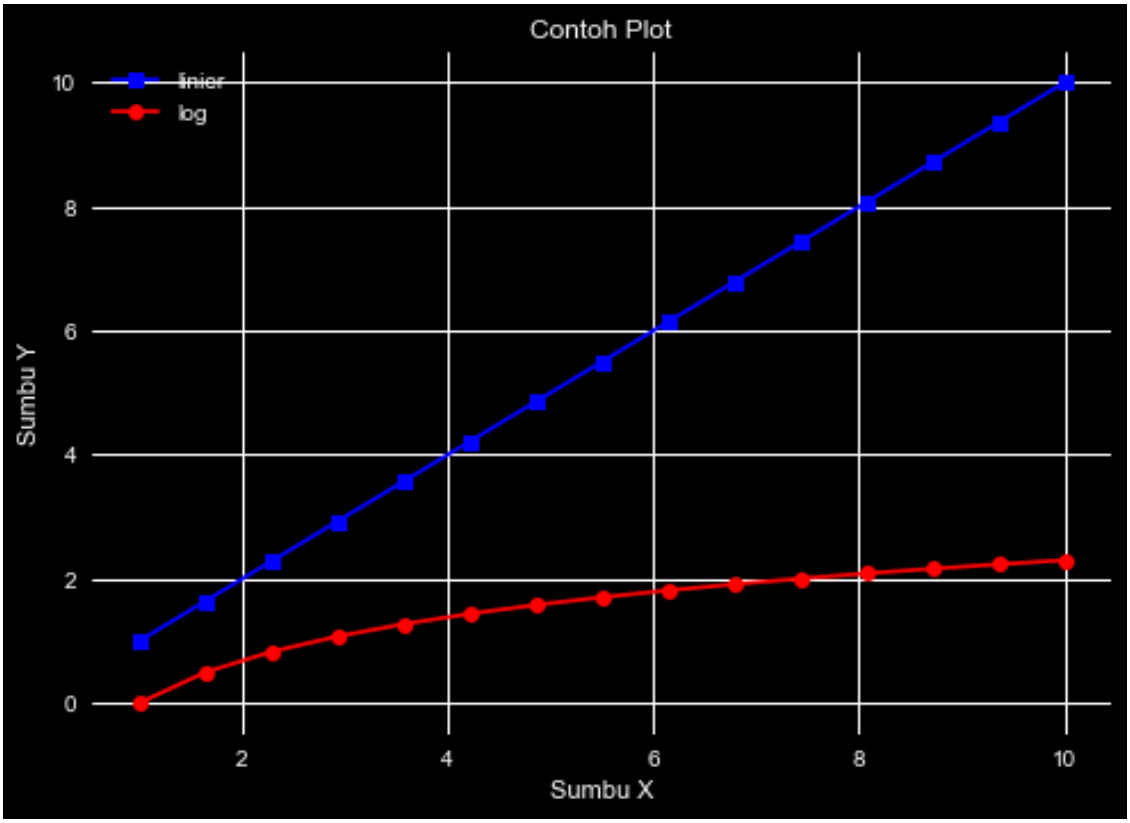
[7]:
```
x = np.linspace(1, 10, 15)

plt.plot(x, x, 'bs-', label = 'linier')
plt.plot(x, np.log(x), 'ro-', label = 'log')

plt.legend()
plt.xlabel('Sumbu X')
plt.ylabel('Sumbu Y')
plt.title('Contoh Plot')

plt.show()
```



1.4 4. Menerapkan Multiple Style

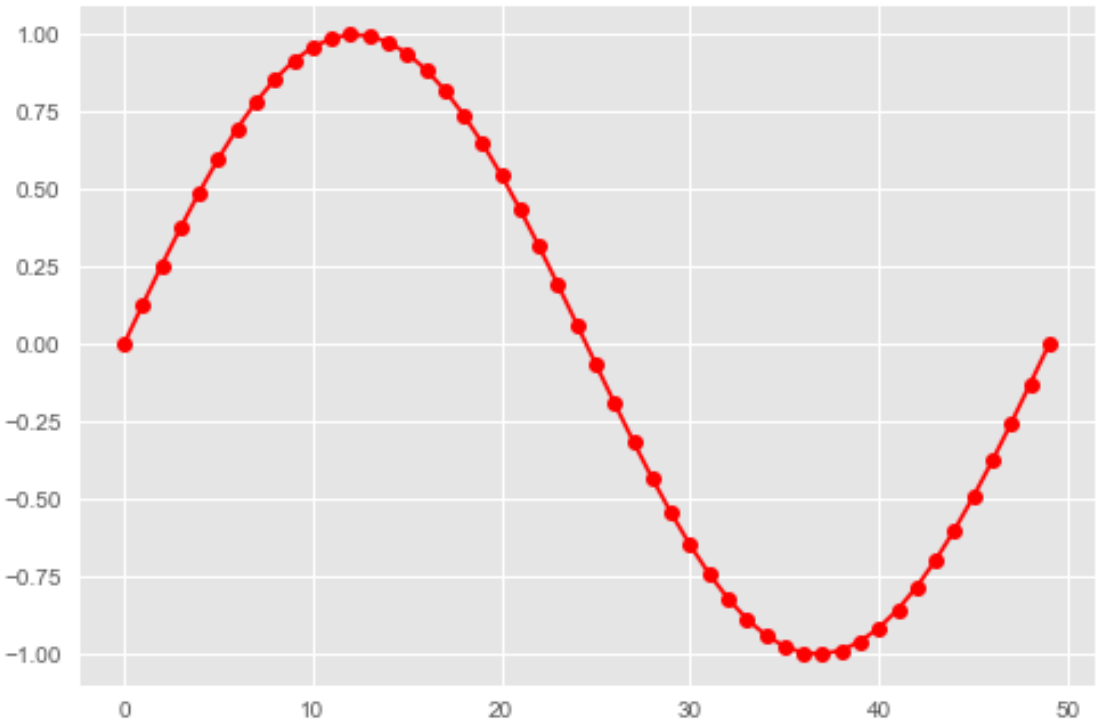
[8]:
```
plt.style.use(['seaborn', 'dark_background'])
```

[9]:
```
x = np.linspace(1, 10, 15)

plt.plot(x, x, 'bs-', label = 'linier')
plt.plot(x, np.log(x), 'ro-', label = 'log')

plt.legend()
plt.xlabel('Sumbu X')
plt.ylabel('Sumbu Y')
plt.title('Contoh Plot')

plt.show()
```

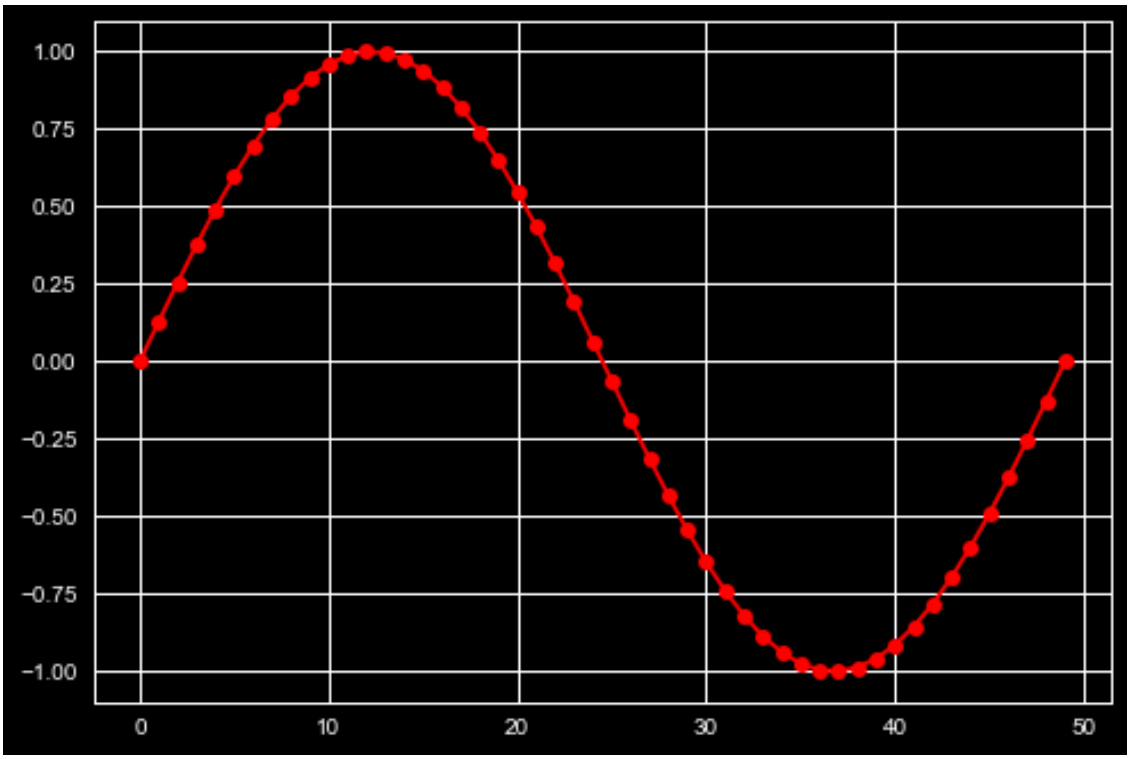


1.5 5. Menerapkan Temporary Styling

[10]:
```
plt.style.use('ggplot')

plt.plot(np.sin(np.linspace(0, 2 * np.pi)), 'r-o')
plt.show()
```



[11]:
```
# temporary
with plt.style.context('dark_background'):
    plt.plot(np.sin(np.linspace(0, 2 * np.pi)), 'r-o')

plt.show()
```



[12]:
```
plt.plot(np.sin(np.linspace(0, 2 * np.pi)), 'r-o')
plt.show()
```