

```
In [1]: 1 pip install seaborn
```

```
Requirement already satisfied: seaborn in c:\users\ahmed islam\anaconda3\lib\site-packages (0.12.2)
Requirement already satisfied: numpy!=1.24.0,>=1.17 in c:\users\ahmed islam\anaconda3\lib\site-packages (from seaborn) (1.24.3)
Requirement already satisfied: pandas>=0.25 in c:\users\ahmed islam\anaconda3\lib\site-packages (from seaborn) (2.0.3)
Requirement already satisfied: matplotlib!=3.6.1,>=3.1 in c:\users\ahmed islam\anaconda3\lib\site-packages (from seaborn) (3.7.2)
Requirement already satisfied: contourpy>=1.0.1 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (1.0.5)
Requirement already satisfied: cycler>=0.10 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (0.11.0)
Requirement already satisfied: fonttools>=4.22.0 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (4.25.0)
Requirement already satisfied: kiwisolver>=1.0.1 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (1.4.4)
Requirement already satisfied: packaging>=20.0 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (23.1)
Requirement already satisfied: pillow>=6.2.0 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (9.4.0)
Requirement already satisfied: pyparsing<3.1,>=2.3.1 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (3.0.9)
Requirement already satisfied: python-dateutil>=2.7 in c:\users\ahmed islam\anaconda3\lib\site-packages (from matplotlib!=3.6.1,>=3.1->seaborn) (2.8.2)
Requirement already satisfied: pytz>=2020.1 in c:\users\ahmed islam\anaconda3\lib\site-packages (from pandas>=0.25->seaborn) (2023.3.post1)
Requirement already satisfied: tzdata>=2022.1 in c:\users\ahmed islam\anaconda3\lib\site-packages (from pandas>=0.25->seaborn) (2023.3)
Requirement already satisfied: six>=1.5 in c:\users\ahmed islam\anaconda3\lib\site-packages (from python-dateutil>=2.7->matplotlib!=3.6.1,>=3.1->seaborn) (1.16.0)
Note: you may need to restart the kernel to use updated packages.
```

```
In [11]: 1 import numpy as np
          2 import pandas as pd
          3 import matplotlib.pyplot as plt
          4 import seaborn as sns
          5
          6 data= sns.load_dataset('iris')
          7
          8 data
          9
```

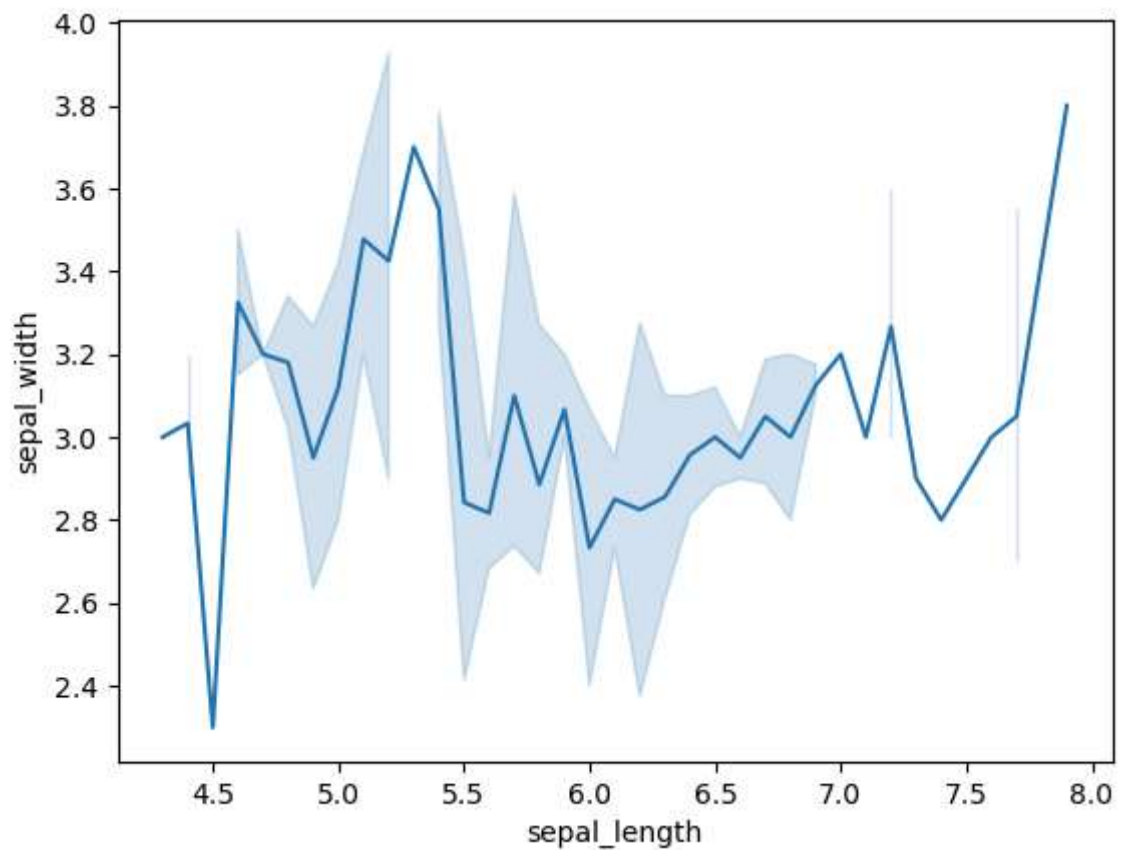
Out[11]:

	sepal_length	sepal_width	petal_length	petal_width	species
0	5.1	3.5	1.4	0.2	setosa
1	4.9	3.0	1.4	0.2	setosa
2	4.7	3.2	1.3	0.2	setosa
3	4.6	3.1	1.5	0.2	setosa
4	5.0	3.6	1.4	0.2	setosa
...
145	6.7	3.0	5.2	2.3	virginica
146	6.3	2.5	5.0	1.9	virginica
147	6.5	3.0	5.2	2.0	virginica
148	6.2	3.4	5.4	2.3	virginica
149	5.9	3.0	5.1	1.8	virginica

150 rows × 5 columns

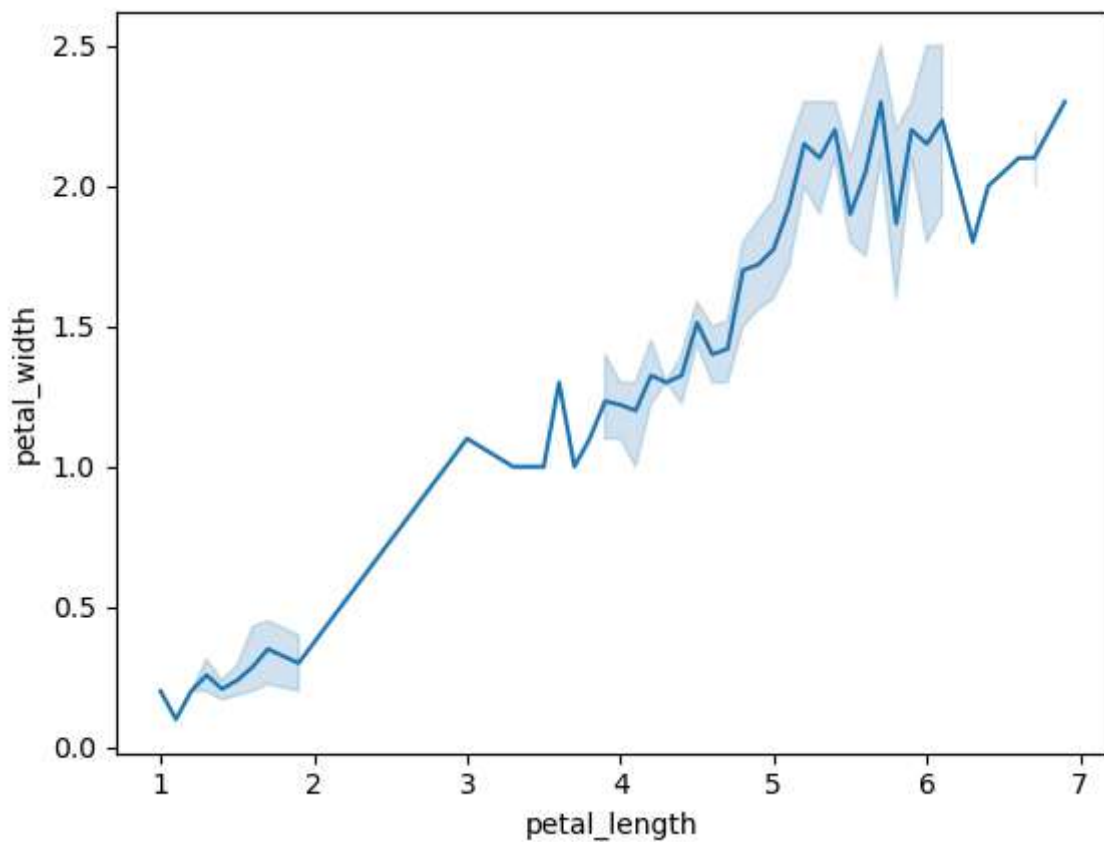
```
In [7]: 1 # Seaborn depends on numpy ,pandas , matplotlib and scipy
        2 import seaborn as sns
        3
        4 # Loading dataset
        5 data = sns.load_dataset("iris")
        6
        7 sns.lineplot(x="sepal_length", y="sepal_width", data=data)
        8
```

Out[7]: <Axes: xlabel='sepal_length', ylabel='sepal_width'>

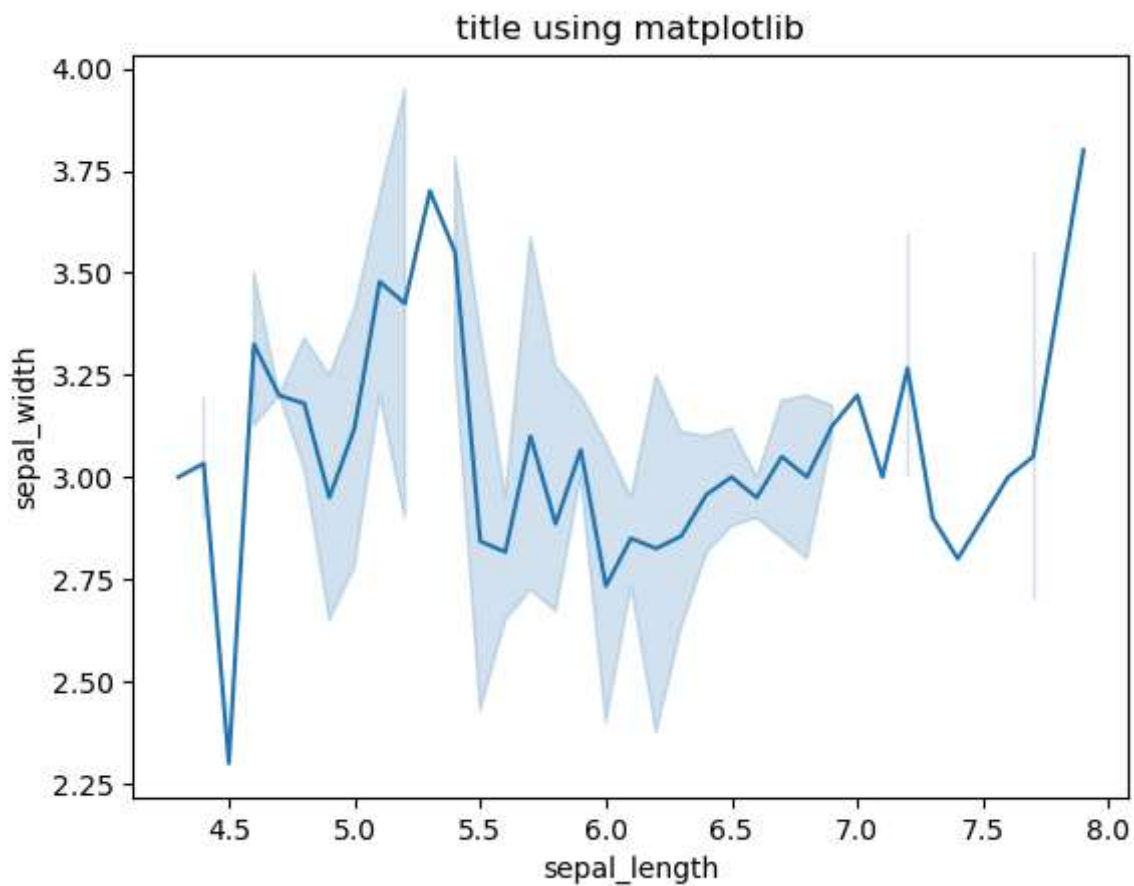


```
In [22]: 1 # Seaborn depends on numpy ,pandas , matplotlib and scipy
2 import seaborn as sns
3
4 # Loading dataset
5 data = sns.load_dataset("iris")
6
7 sns.lineplot( data ,x="petal_length", y="petal_width",)
8
```

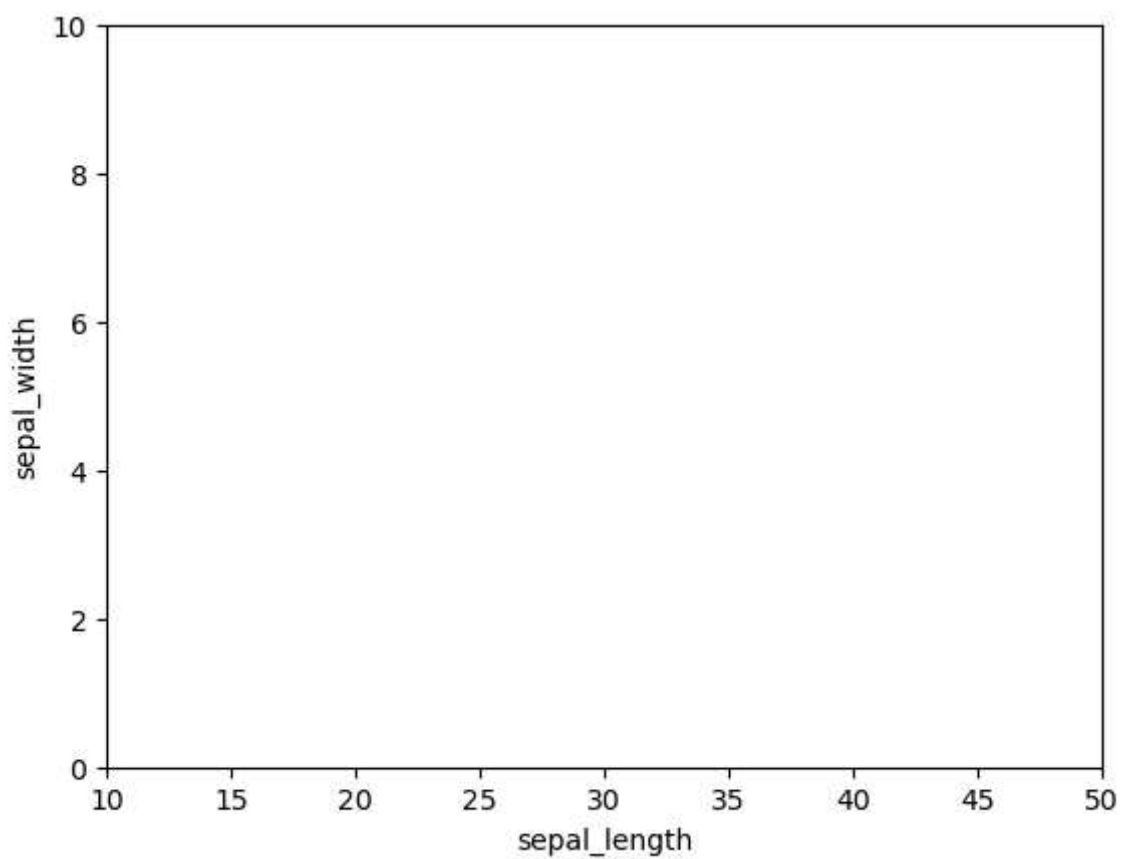
Out[22]: <Axes: xlabel='petal_length', ylabel='petal_width'>



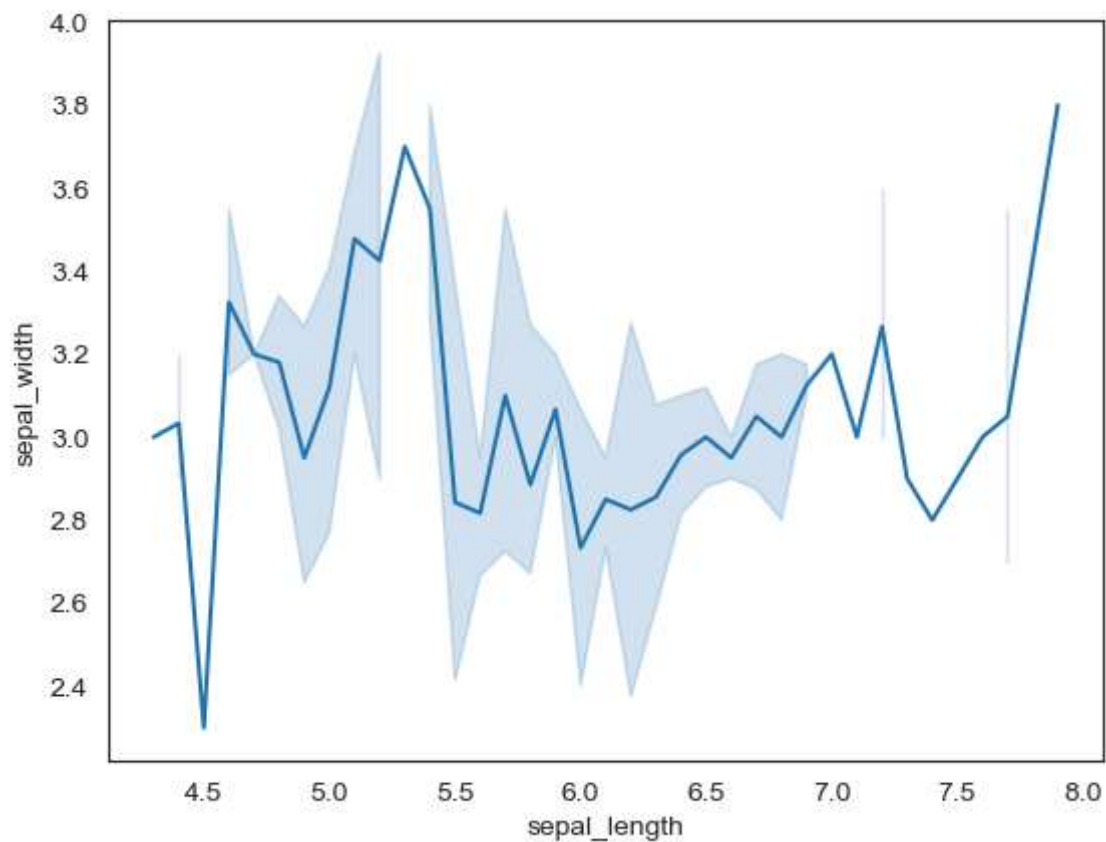
```
In [20]: 1 import numpy as np
2 import pandas as pd
3 import matplotlib.pyplot as plt
4 import seaborn as sns
5
6 data= sns.load_dataset('iris')
7
8 sns.lineplot(data, x="sepal_length", y="sepal_width")
9
10 plt.title("title using matplotlib")
11 plt.show()
12
```



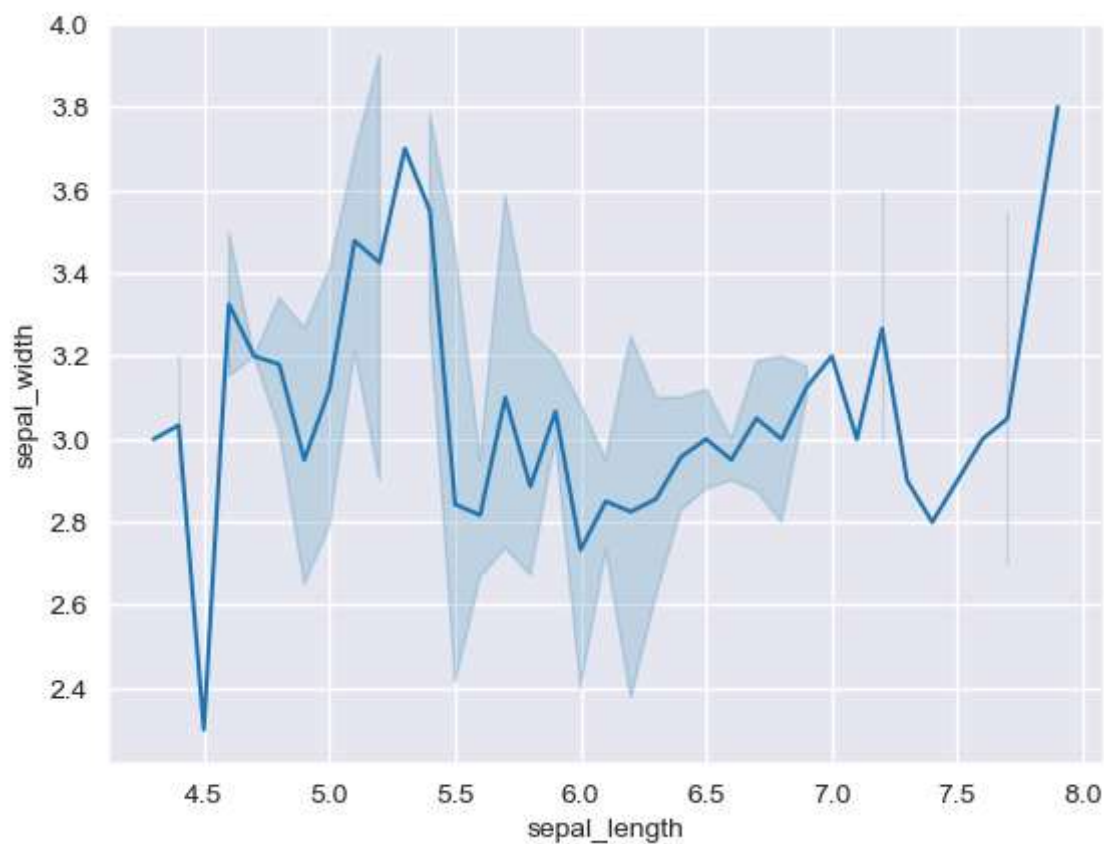
```
In [33]: 1 import seaborn as sns
2 import matplotlib.pyplot as plt
3
4 # Example data
5 data= sns.load_dataset("iris")
6
7 # Create a Seaborn plot with xlim and ylim
8 sns.lineplot(data,x="sepal_length", y="sepal_width")
9
10 plt.xlim(10, 50)
11 plt.ylim(0, 10)
12
13 # Display the plot
14
15 plt.show()
16
17
18
```



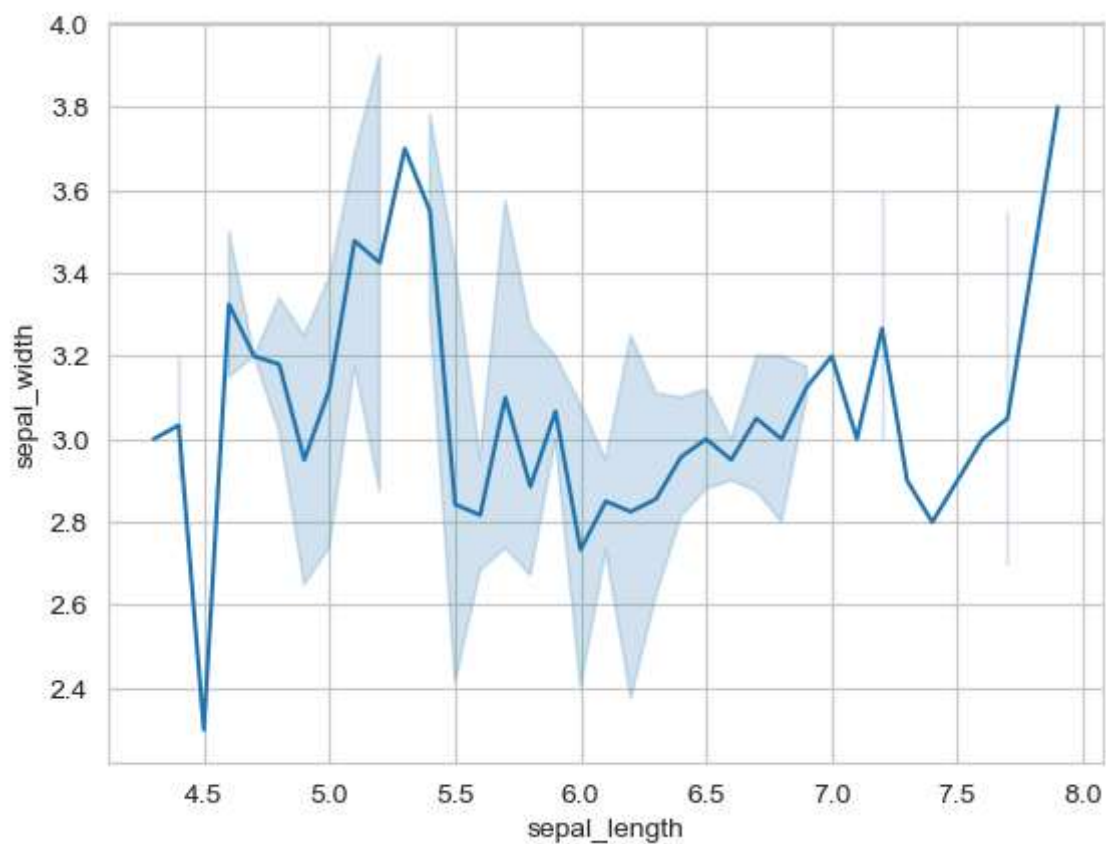
```
In [56]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.lineplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.set_style("dark")
13 plt.show()
14
```



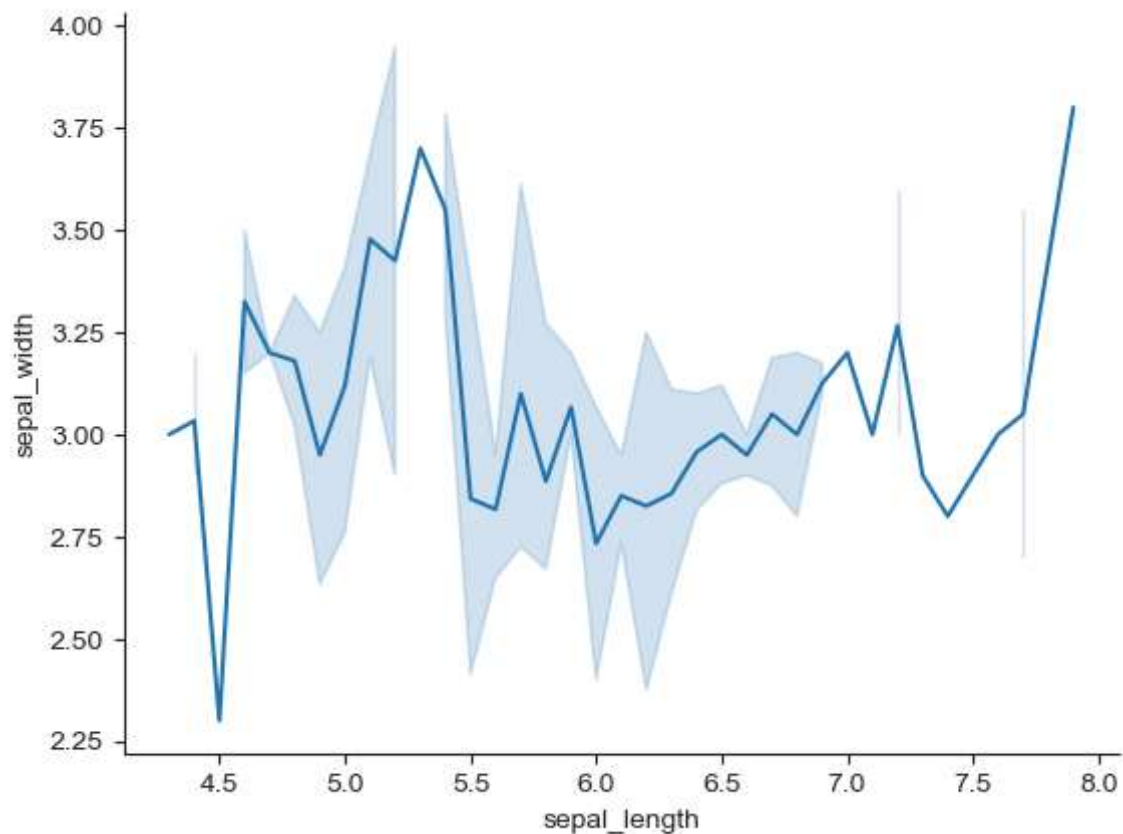
```
In [58]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.lineplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.set_style("darkgrid")
13 plt.show()
14
```



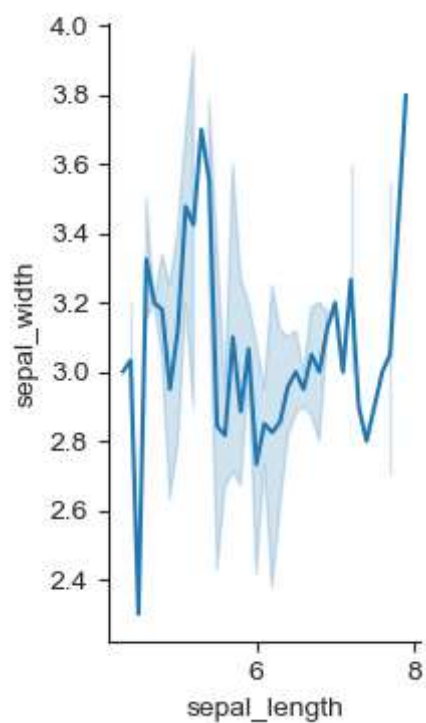

```
In [65]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.lineplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.set_style("whitegrid")
13 plt.show()
14
```



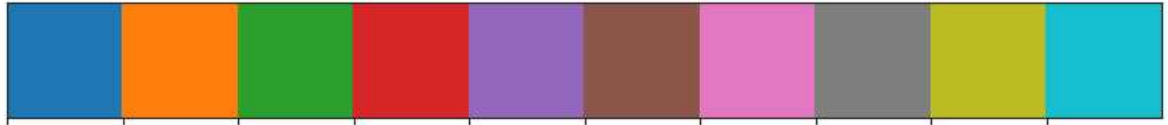
```
In [70]: 1 import seaborn as sns
2 import matplotlib.pyplot as plt
3
4 # loading dataset
5 data = sns.load_dataset("iris")
6
7 # draw lineplot
8 sns.lineplot(x="sepal_length", y="sepal_width", data=data)
9
10 # changing the theme to dark
11 sns.despine()
```



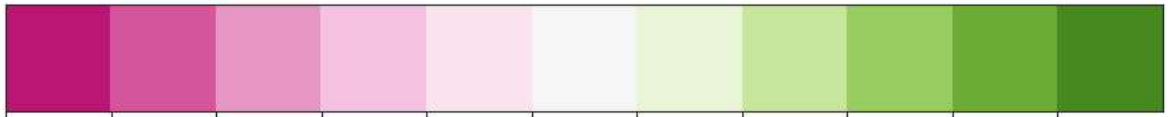
```
In [71]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # changing the figure size
9 plt.figure(figsize = (2, 4))
10
11 # draw lineplot
12 sns.lineplot(x="sepal_length", y="sepal_width", data=data)
13
14 # Removing the spines
15 sns.despine()
16
17 plt.show()
18
```



```
In [89]: 1 import seaborn as sns
2 import matplotlib.pyplot as plt
3
4 # current color palette
5 pal_color = sns.color_palette()
6
7 # plots the color palette as a
8 # horizontal array
9 sns.palplot(pal_color)
10
11 plt.show()
12
```

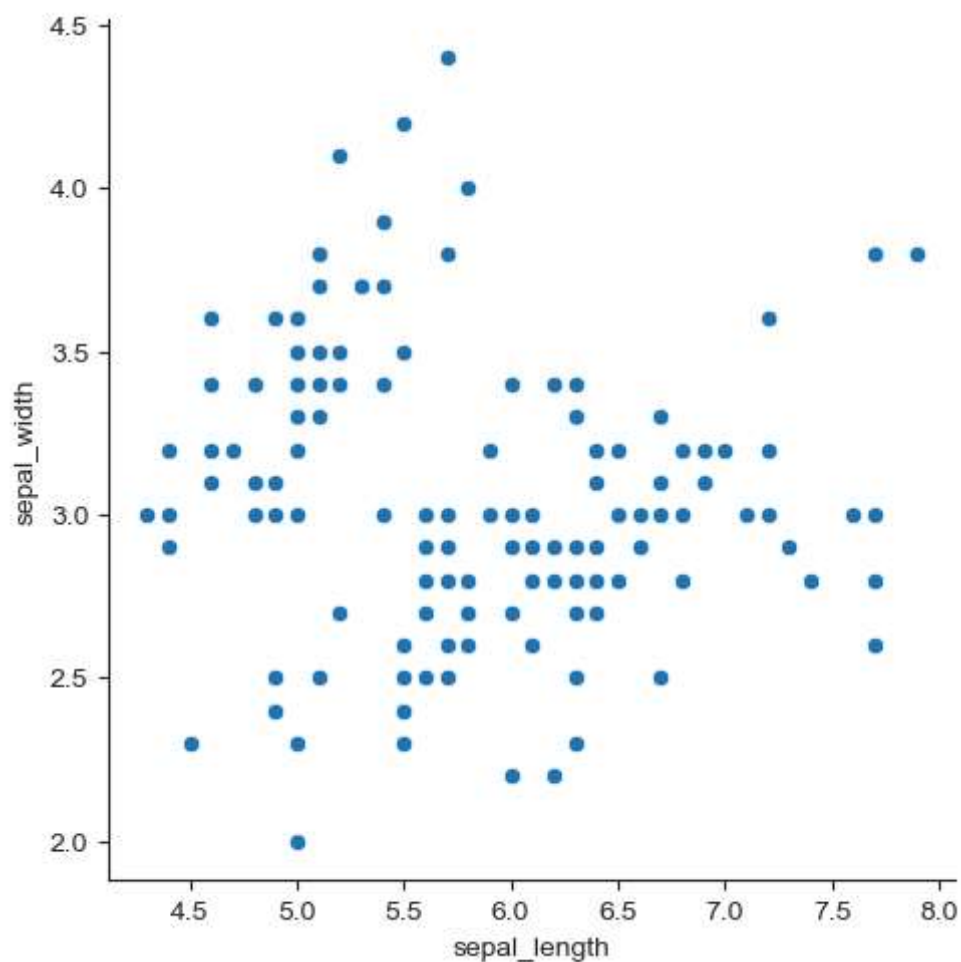


```
In [83]: 1 import seaborn as sns
2 import matplotlib.pyplot as plt
3
4 # current color palette
5 palette = sns.color_palette('PiYG', 11)
6
7 # diverging color palette
8 sns.palplot(palette)
9
10 plt.show()
11
```



```
In [93]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.relplot(x="sepal_length", y="sepal_width", data=data)
10 plt.show()
```

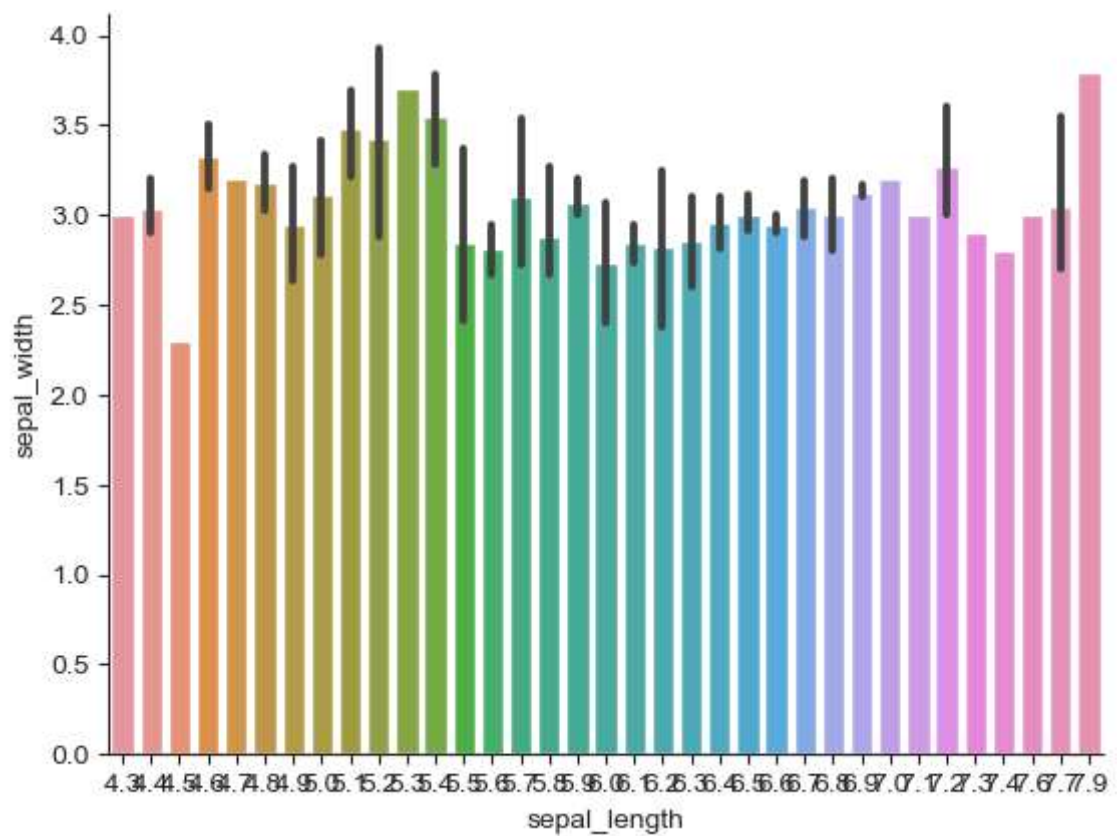
C:\Users\Ahmed Islam\anaconda3\Lib\site-packages\seaborn\axisgrid.py:118: UserWarning: The figure layout has changed to tight
self._figure.tight_layout(*args, **kwargs)



```

In [94]: 1 # importing packages
          2 import seaborn as sns
          3 import matplotlib.pyplot as plt
          4
          5 # loading dataset
          6 data = sns.load_dataset("iris")
          7
          8 # draw lineplot
          9 sns.barplot(x="sepal_length", y="sepal_width", data=data)
         10
         11 # changing the theme to dark
         12 sns.despine()
         13

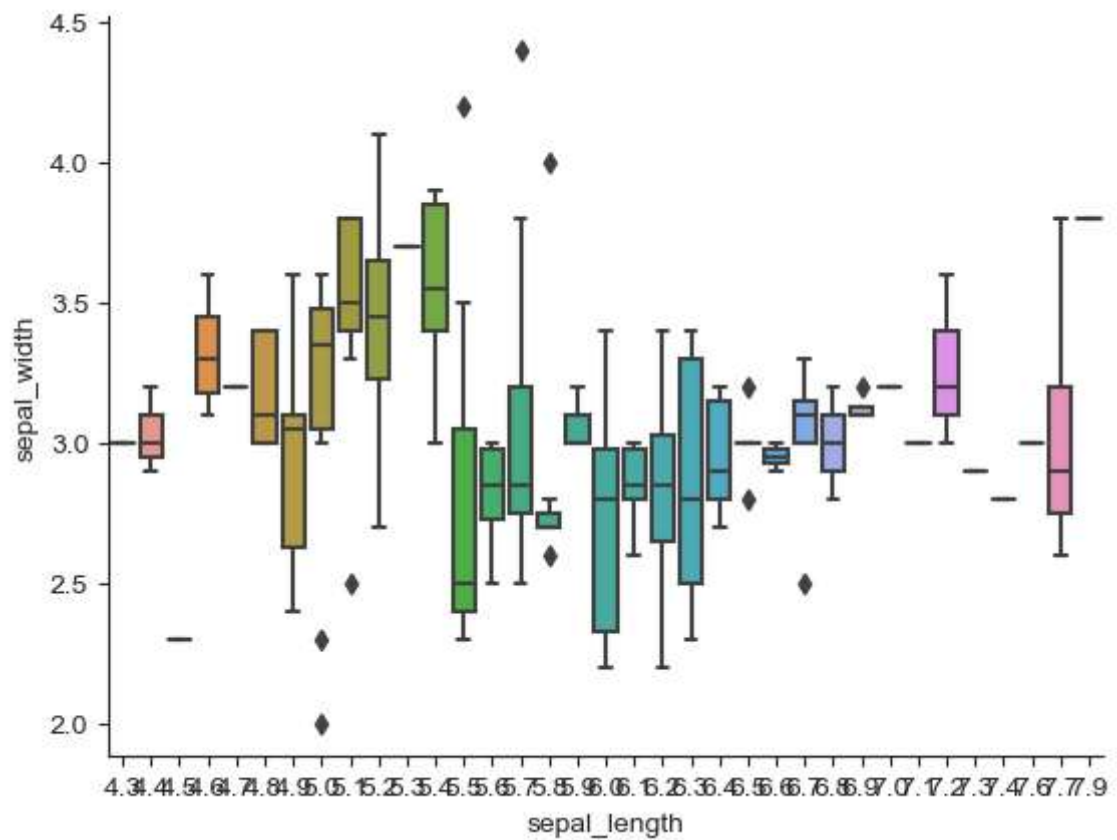
```



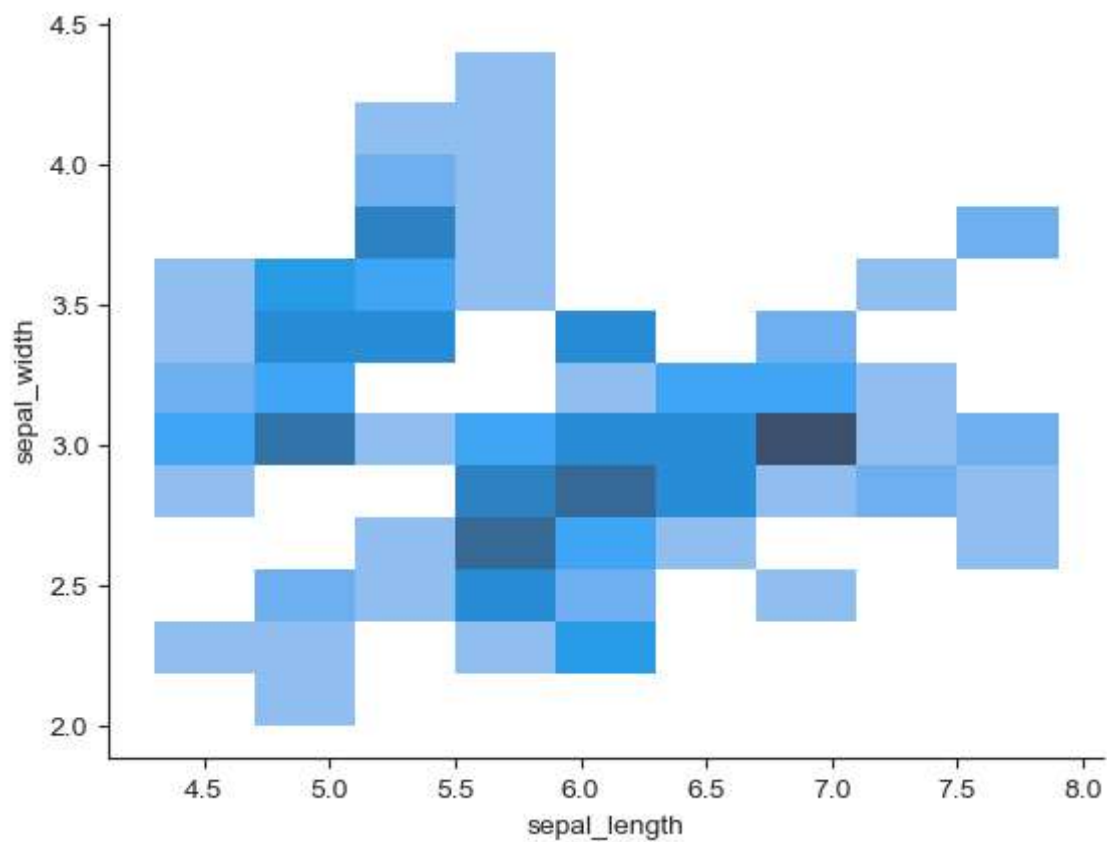
```

In [95]: 1 # importing packages
          2 import seaborn as sns
          3 import matplotlib.pyplot as plt
          4
          5 # loading dataset
          6 data = sns.load_dataset("iris")
          7
          8 # draw lineplot
          9 sns.boxplot(x="sepal_length", y="sepal_width", data=data)
         10
         11 # changing the theme to dark
         12 sns.despine()
         13

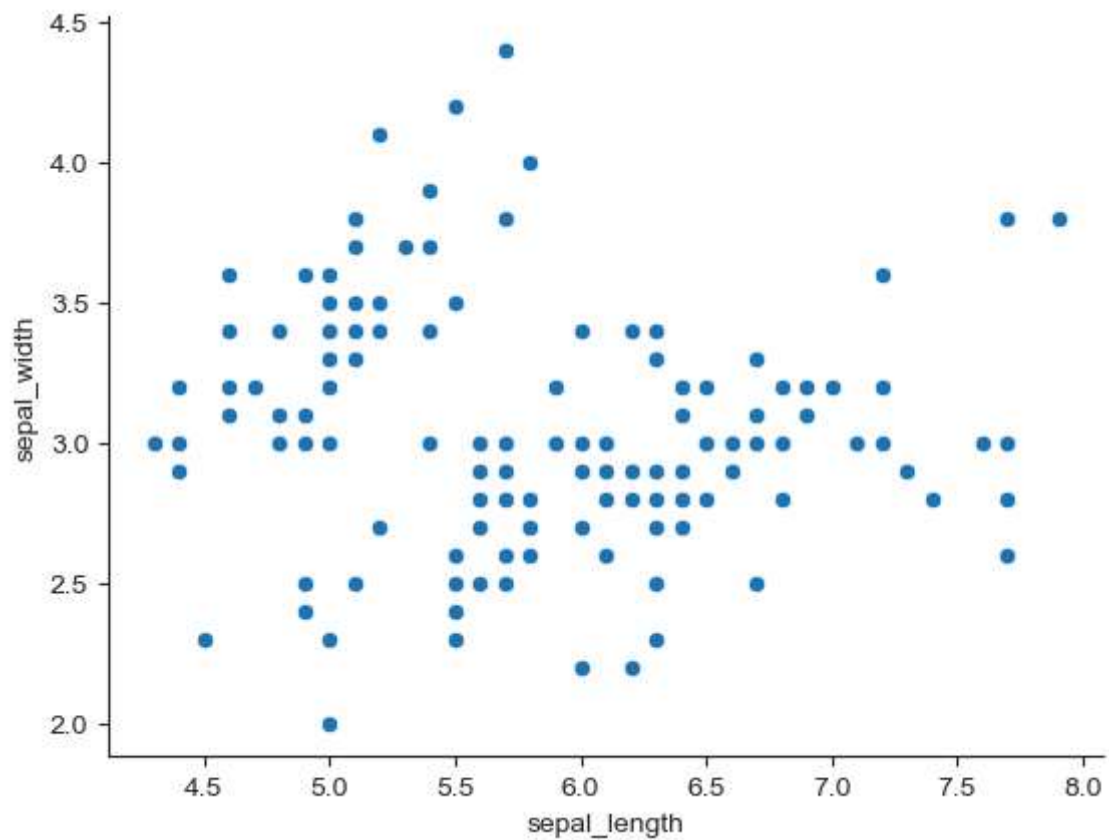
```



```
In [96]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.histplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.despine()
13
```



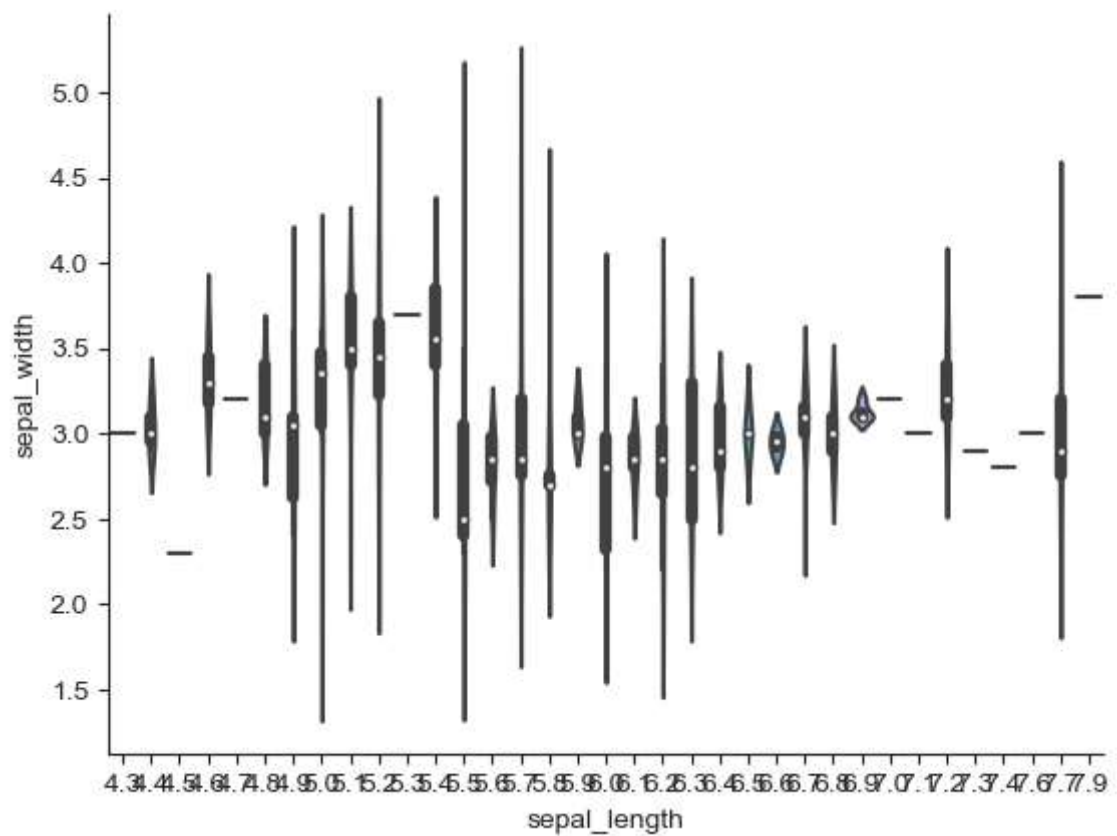

```
In [97]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.scatterplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.despine()
13
```



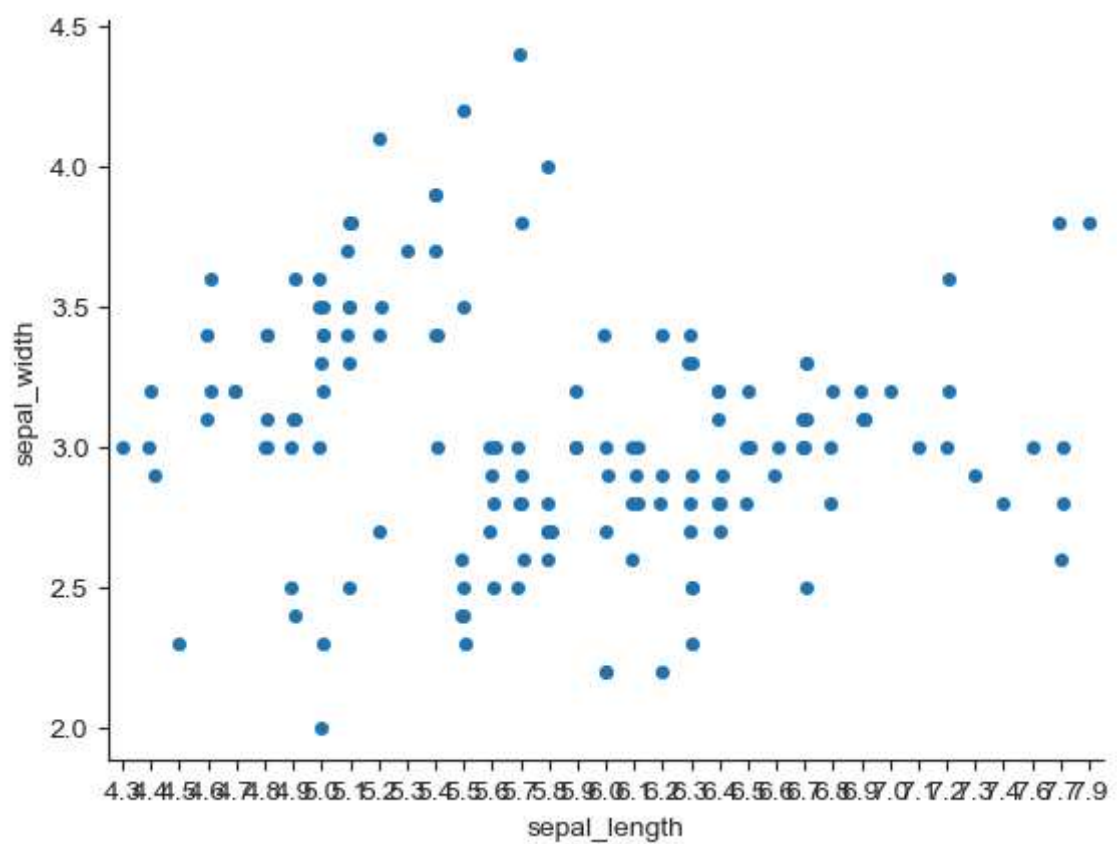
```

In [99]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.violinplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.despine()
13

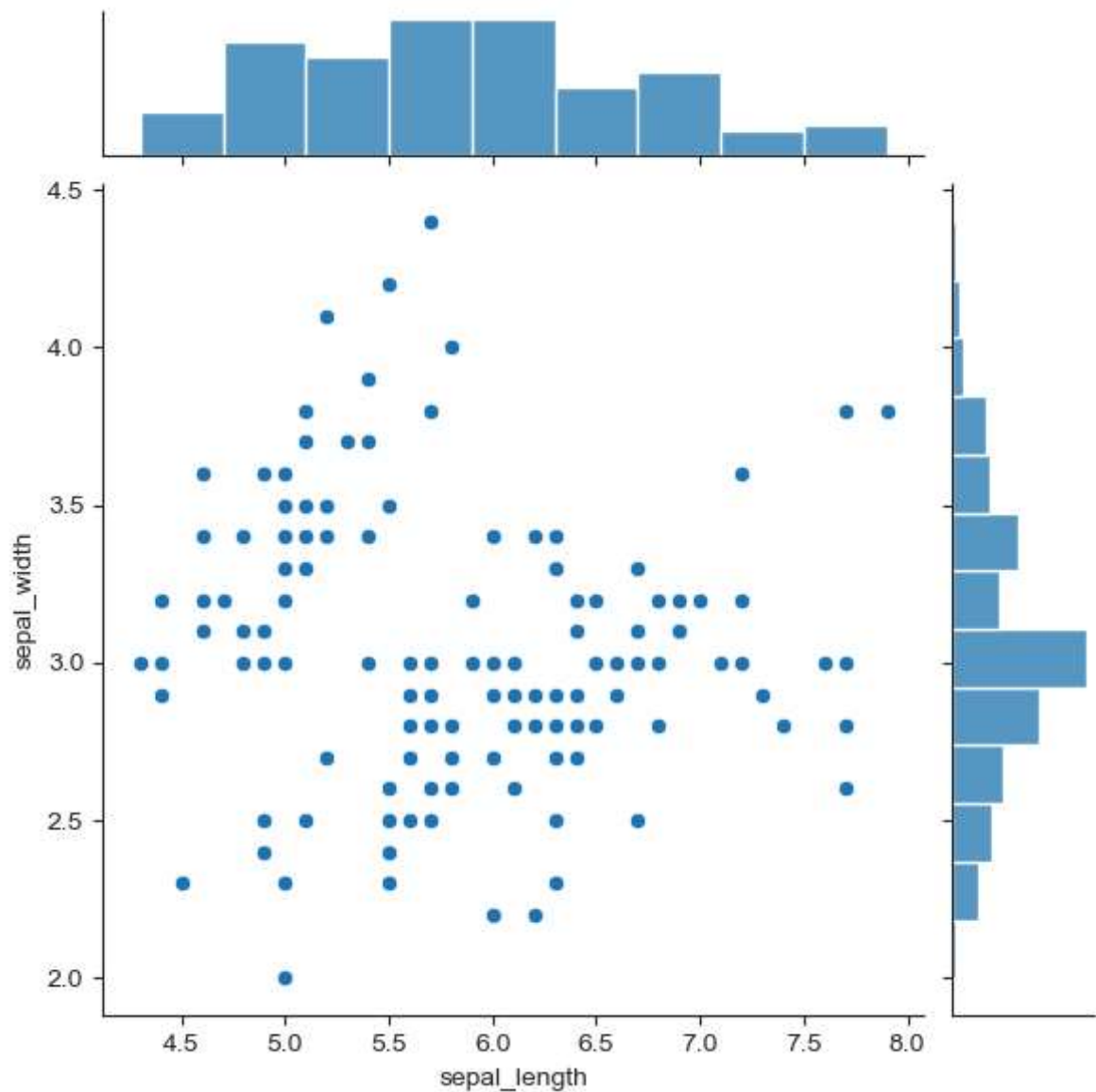
```



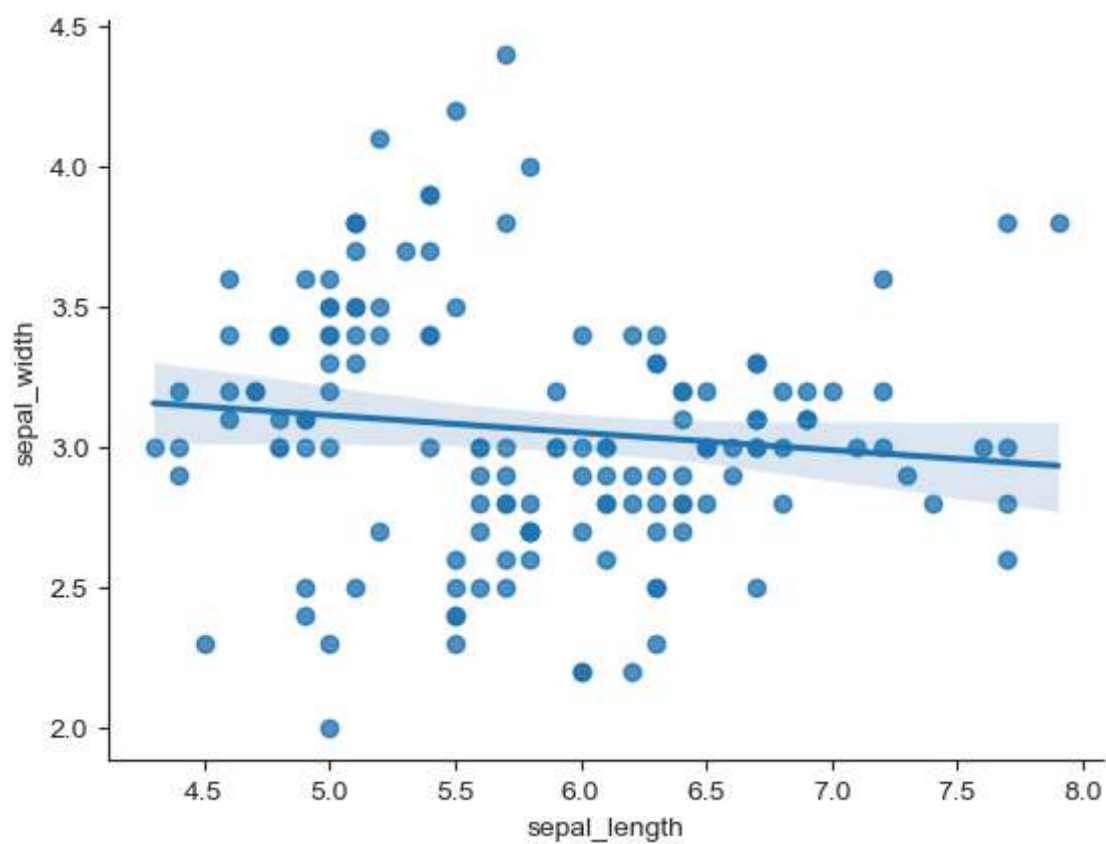
```
In [100]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.stripplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.despine()
13
```



```
In [112]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.jointplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.despine()
13
```



```
In [120]: 1 # importing packages
2 import seaborn as sns
3 import matplotlib.pyplot as plt
4
5 # loading dataset
6 data = sns.load_dataset("iris")
7
8 # draw lineplot
9 sns.regplot(x="sepal_length", y="sepal_width", data=data)
10
11 # changing the theme to dark
12 sns.despine()
13
```



```
In [ ]: 1
```