Data Analysis Report

Data Summary

count:

{'sepal_length': 150.0, 'sepal_width': 150.0, 'petal_length': 150.0, 'petal_width': 150.0, 'species': 150}

unique:

{'sepal_length': nan, 'sepal_width': nan, 'petal_length': nan, 'petal_width': nan, 'species': 3}

top:

{'sepal_length': nan, 'sepal_width': nan, 'petal_length': nan, 'petal_width': nan, 'species': 'Iris-setosa'}

freq:

{'sepal_length': nan, 'sepal_width': nan, 'petal_length': nan, 'petal_width': nan, 'species': 50}

mean:

{'sepal_length': 5.843333333333334, 'sepal_width': 3.0540000000000003, 'petal_length': 3.758666666666666, 'petal_width': 1.1986666666666668, 'species': nan}

std:

{'sepal_length': 0.828066127977863, 'sepal_width': 0.4335943113621737, 'petal_length': 1.7644204199522626, 'petal_width': 0.7631607417008411, 'species': nan}

min:

{'sepal_length': 4.3, 'sepal_width': 2.0, 'petal_length': 1.0, 'petal_width': 0.1, 'species': nan}

25%:

{'sepal_length': 5.1, 'sepal_width': 2.8, 'petal_length': 1.6, 'petal_width': 0.3, 'species': nan}

50%:

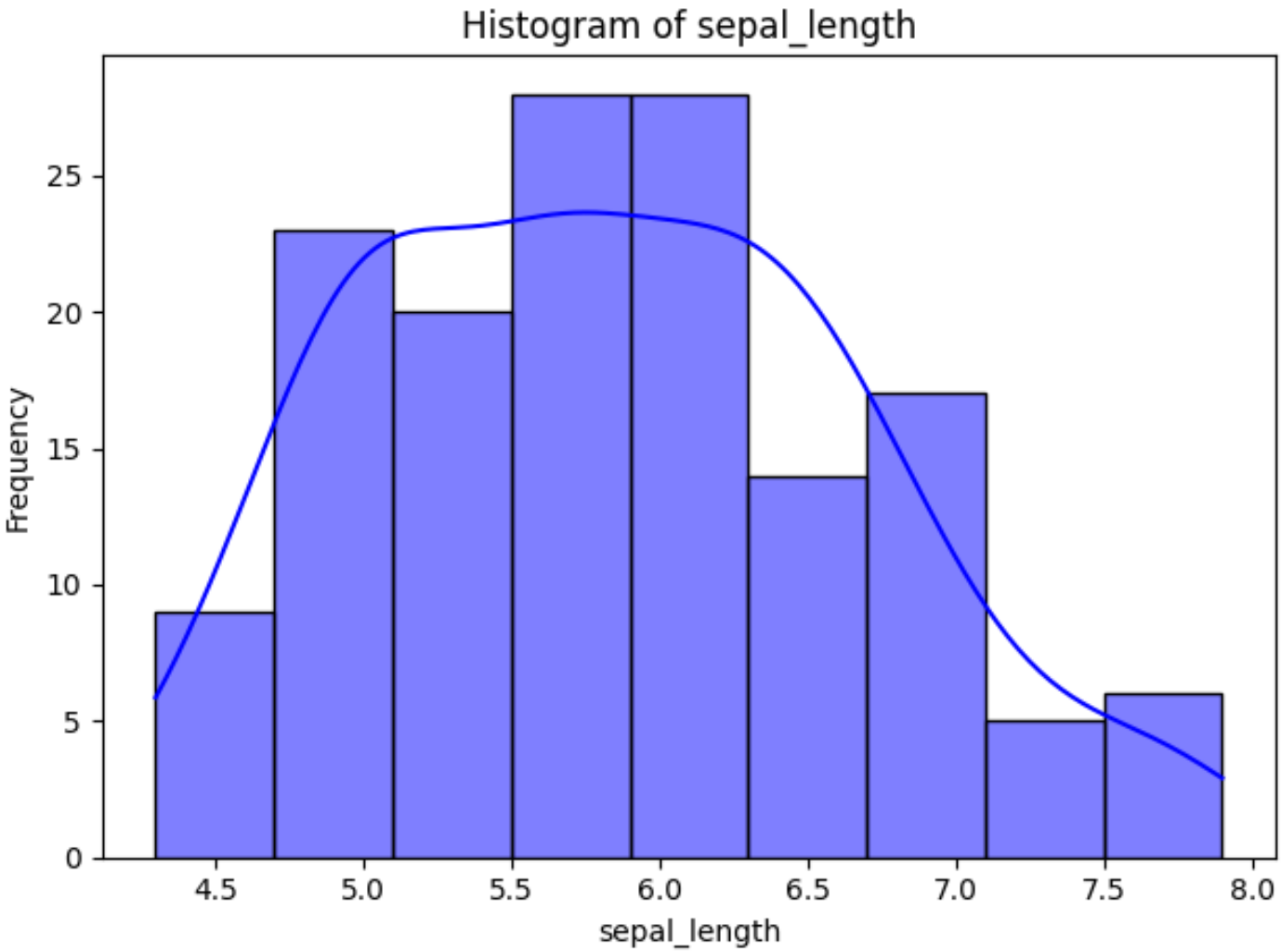
{'sepal_length': 5.8, 'sepal_width': 3.0, 'petal_length': 4.35, 'petal_width': 1.3, 'species': nan}

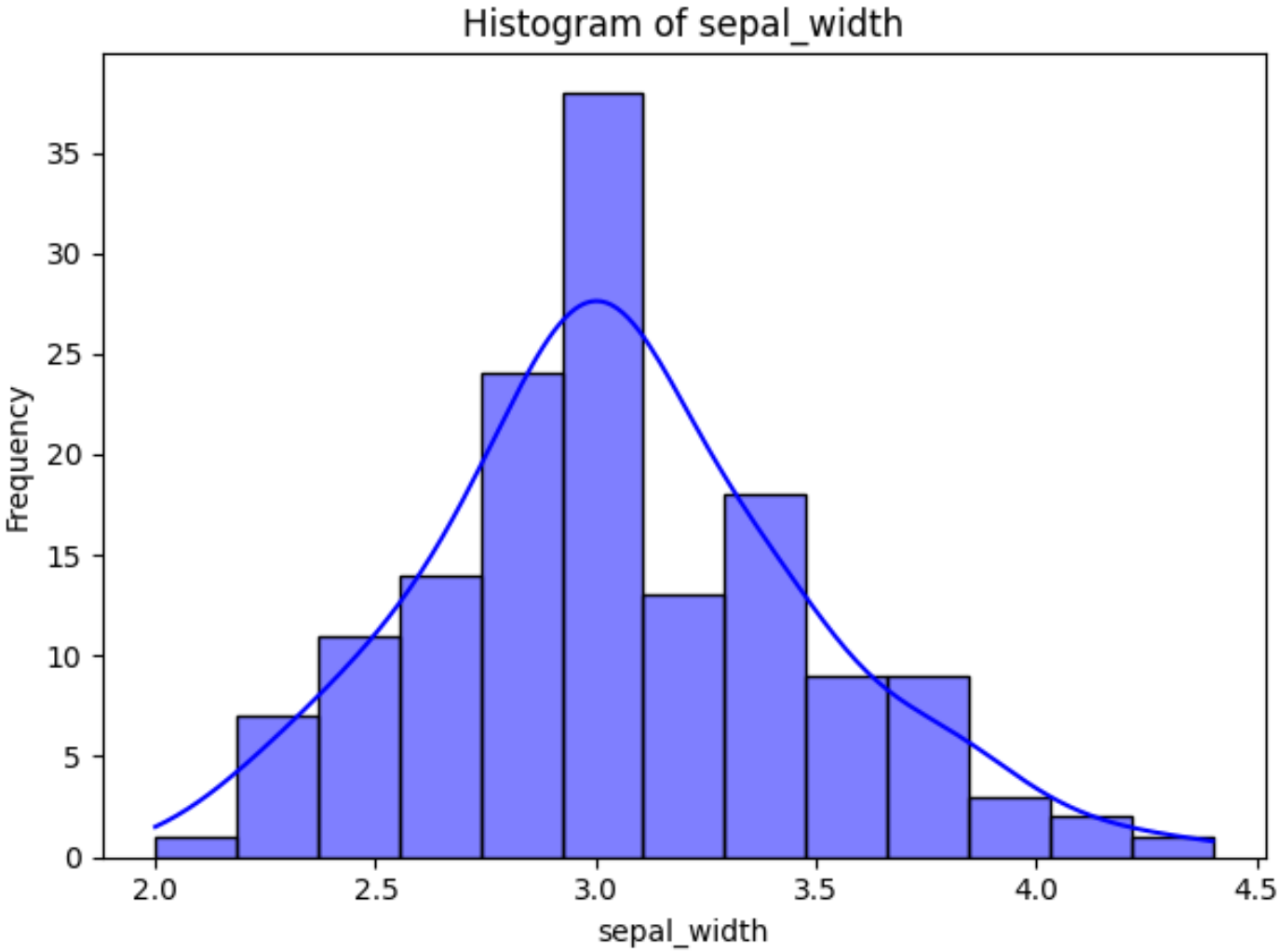
75%:

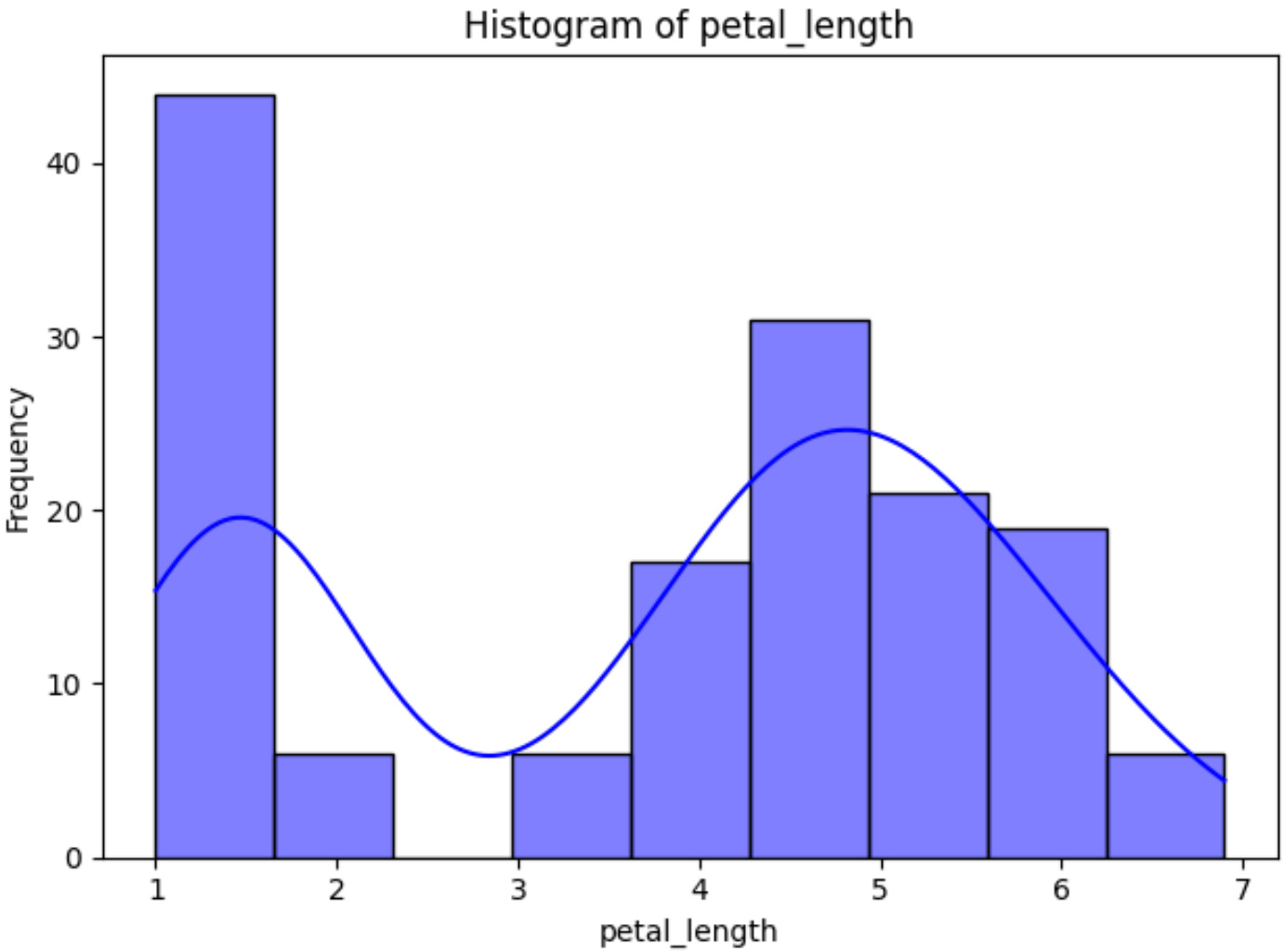
{'sepal_length': 6.4, 'sepal_width': 3.3, 'petal_length': 5.1, 'petal_width': 1.8, 'species': nan}

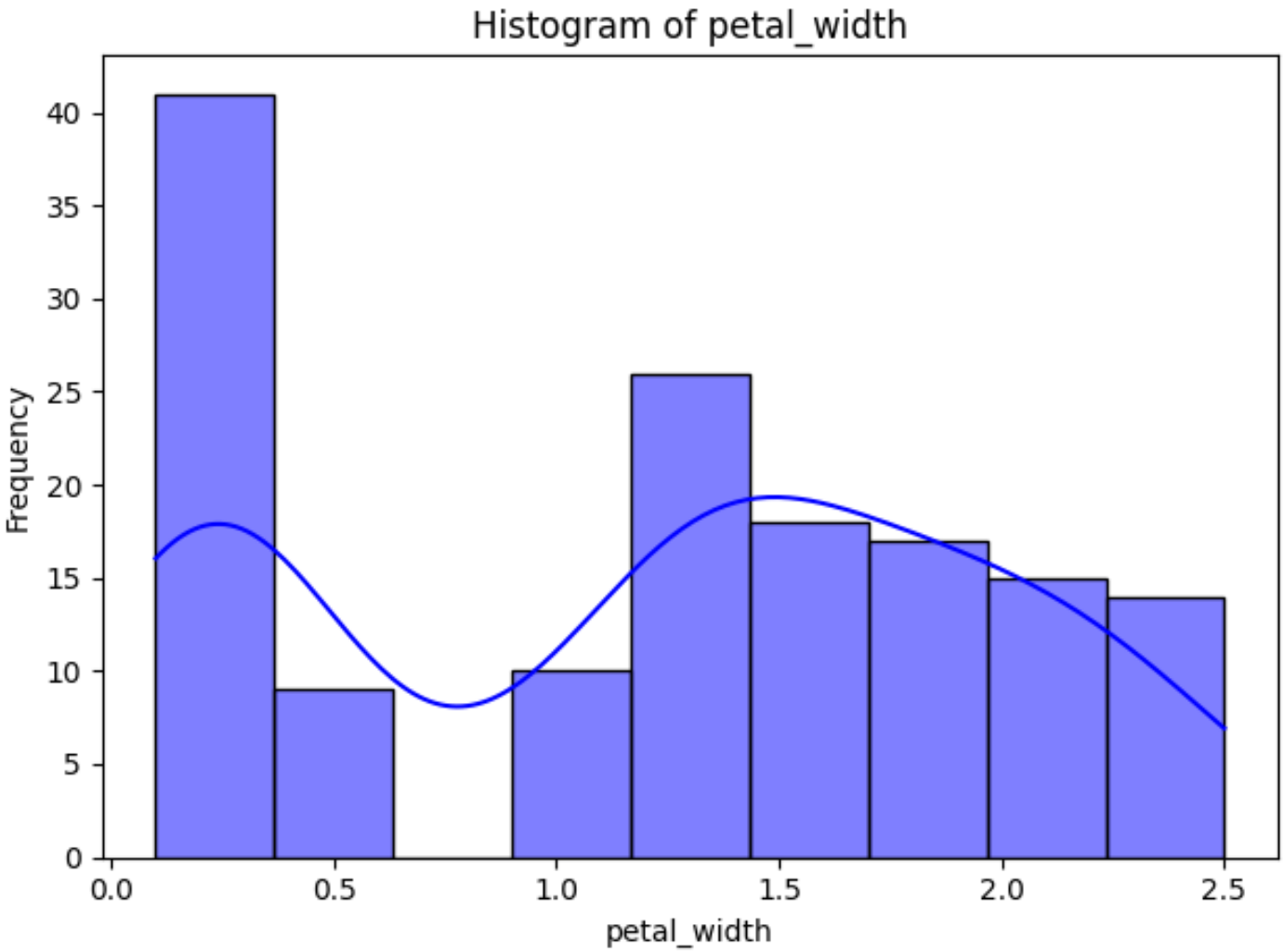
max:

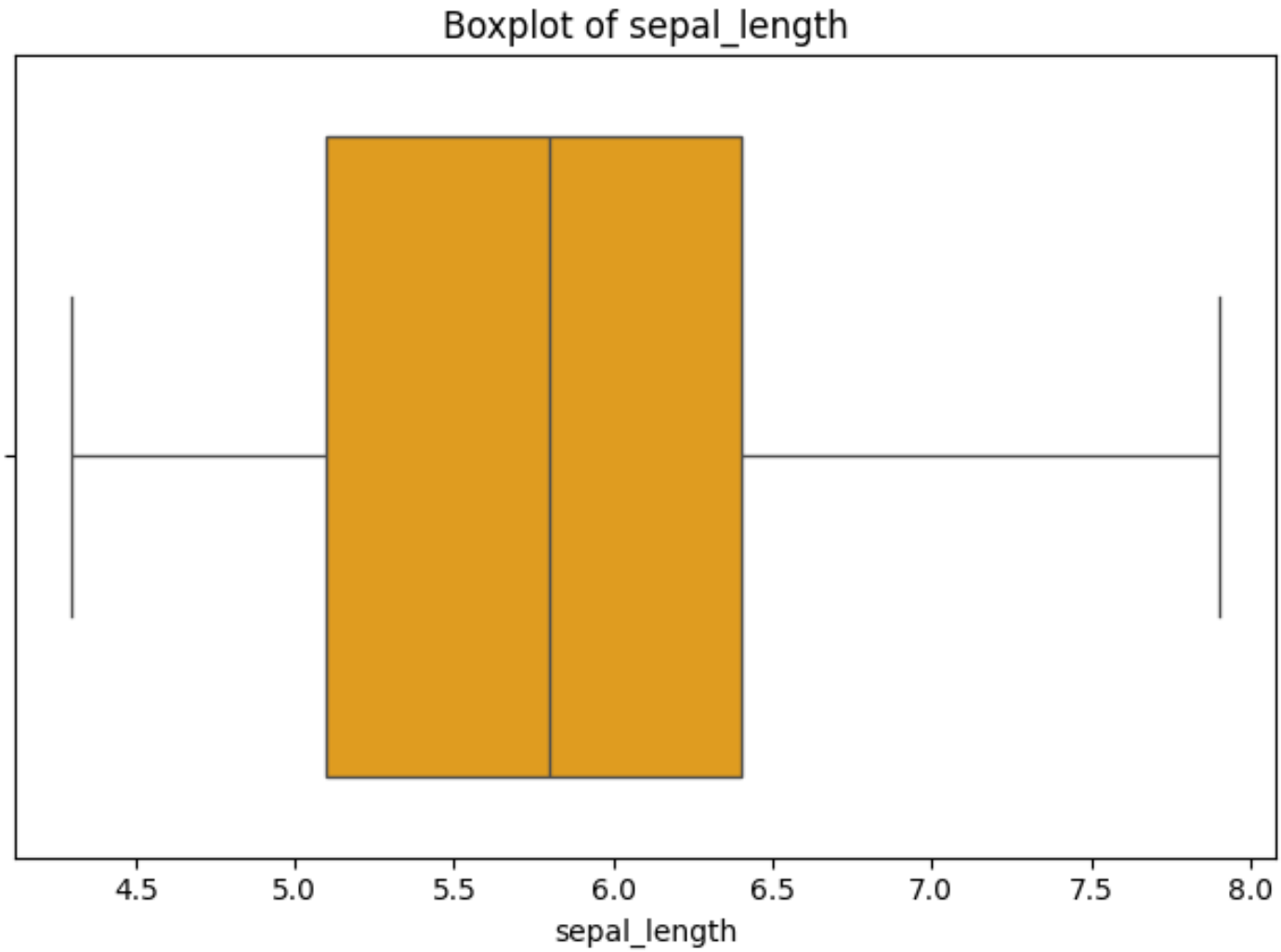
{'sepal_length': 7.9, 'sepal_width': 4.4, 'petal_length': 6.9, 'petal_width': 2.5, 'species': nan}

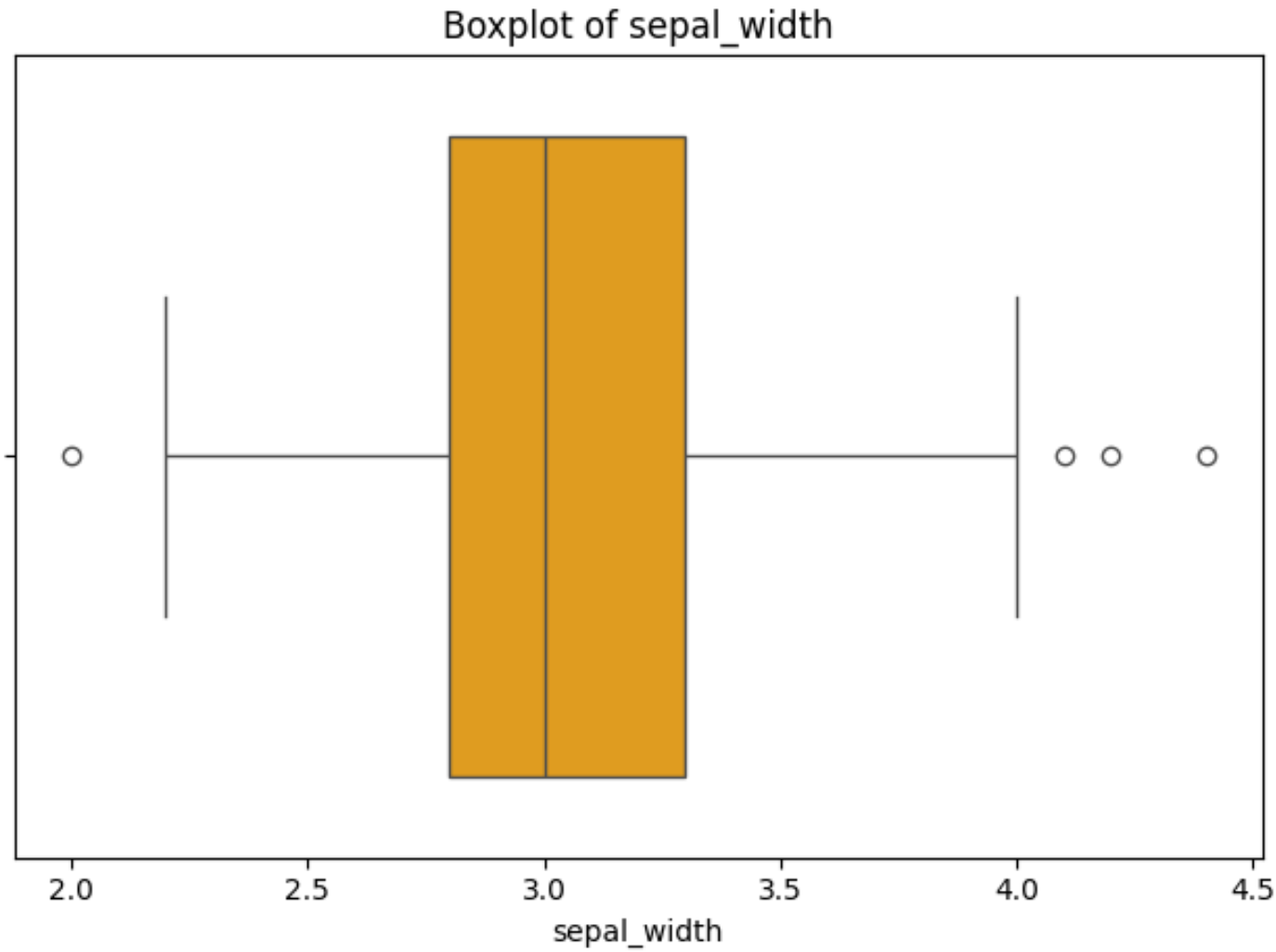

Histogram of sepal_length
Frequency
0
5
10
15
20
25
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
sepal_length

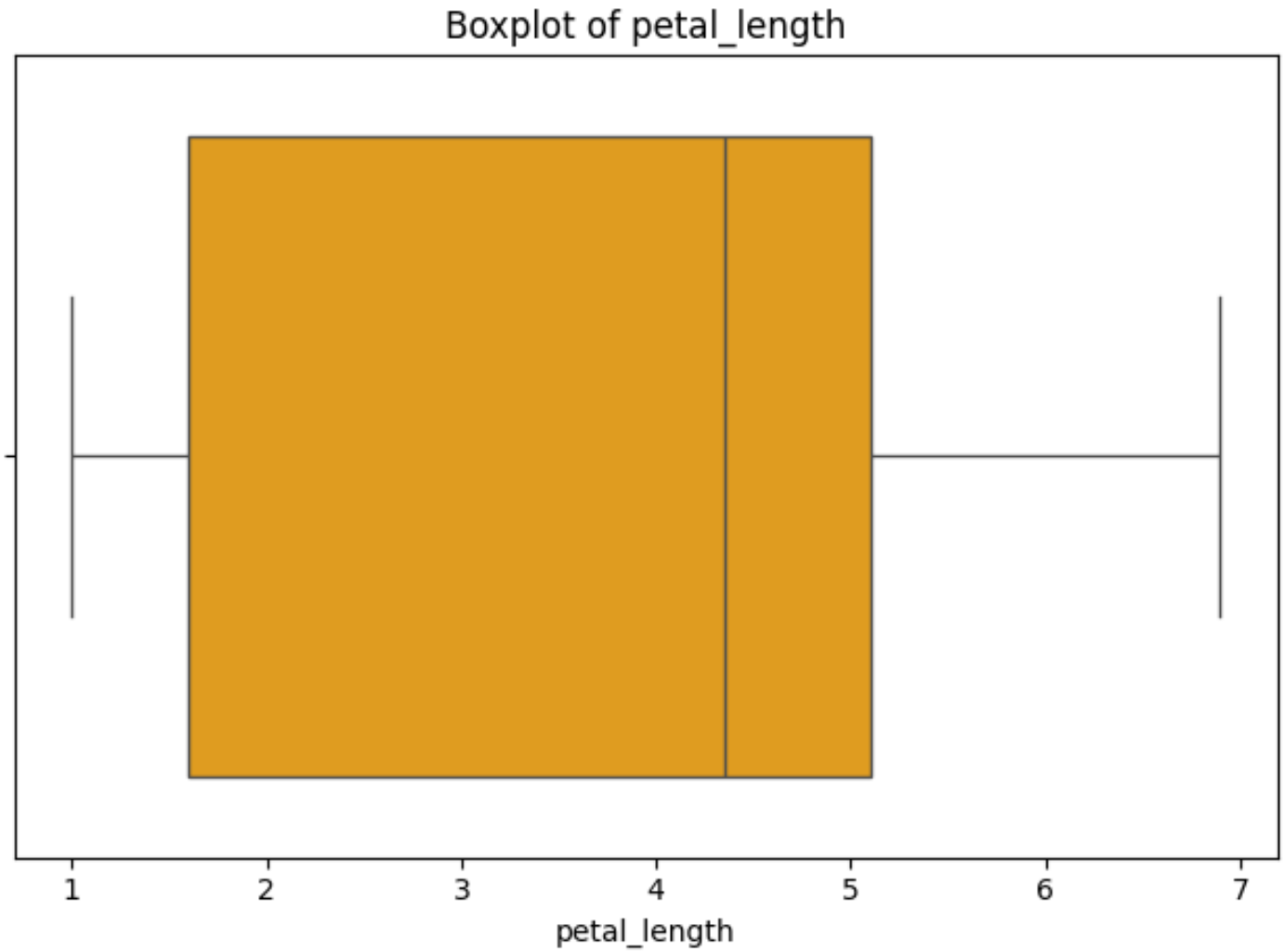

Histogram of sepal_width
Frequency
sepal_width
0
5
10
15
20
25
30
35
2.0
2.5
3.0
3.5
4.0
4.5

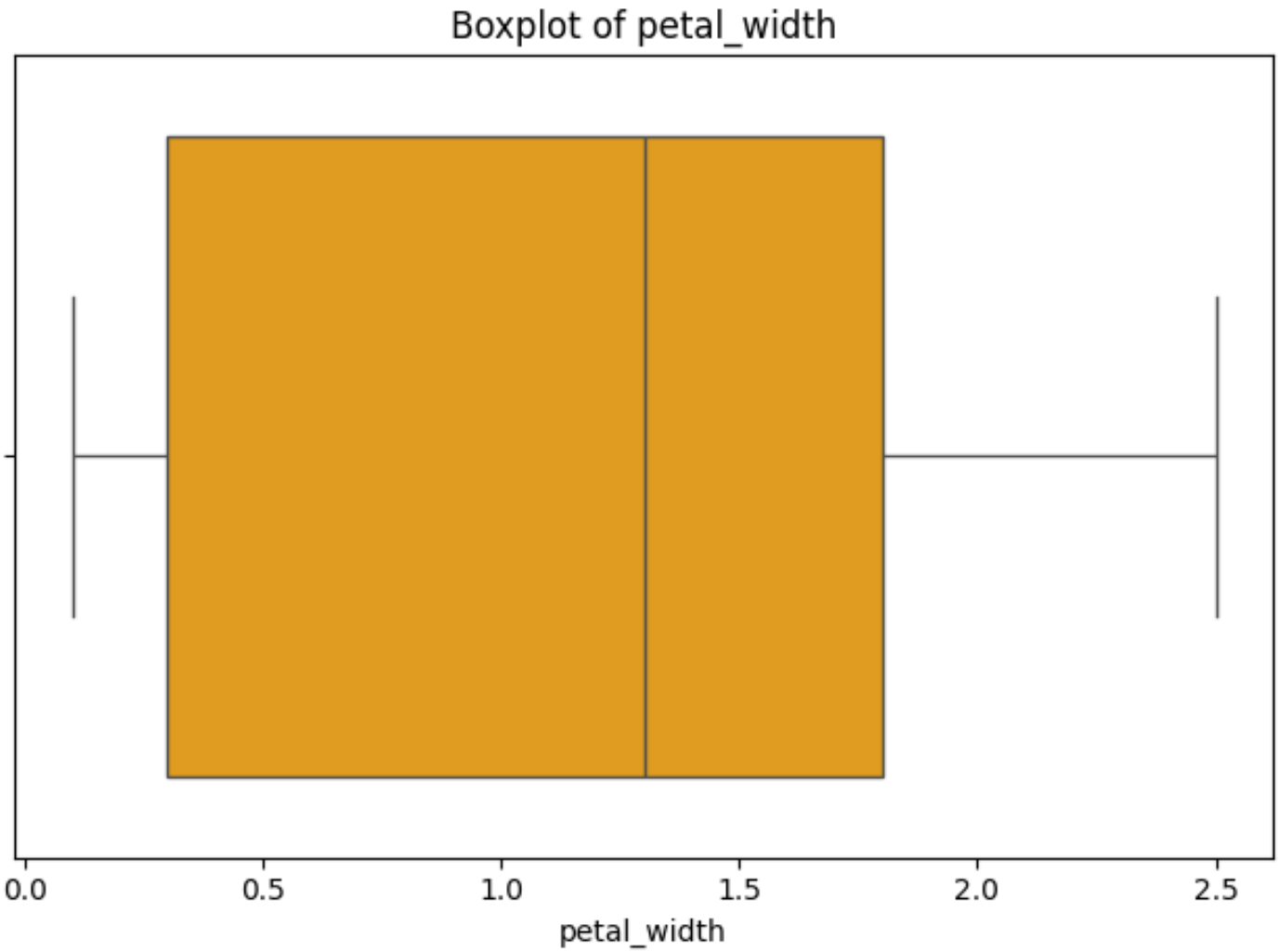

Histogram of petal_length
Frequency
petal_length
0
10
20
30
40
1
2
3
4
5
6
7

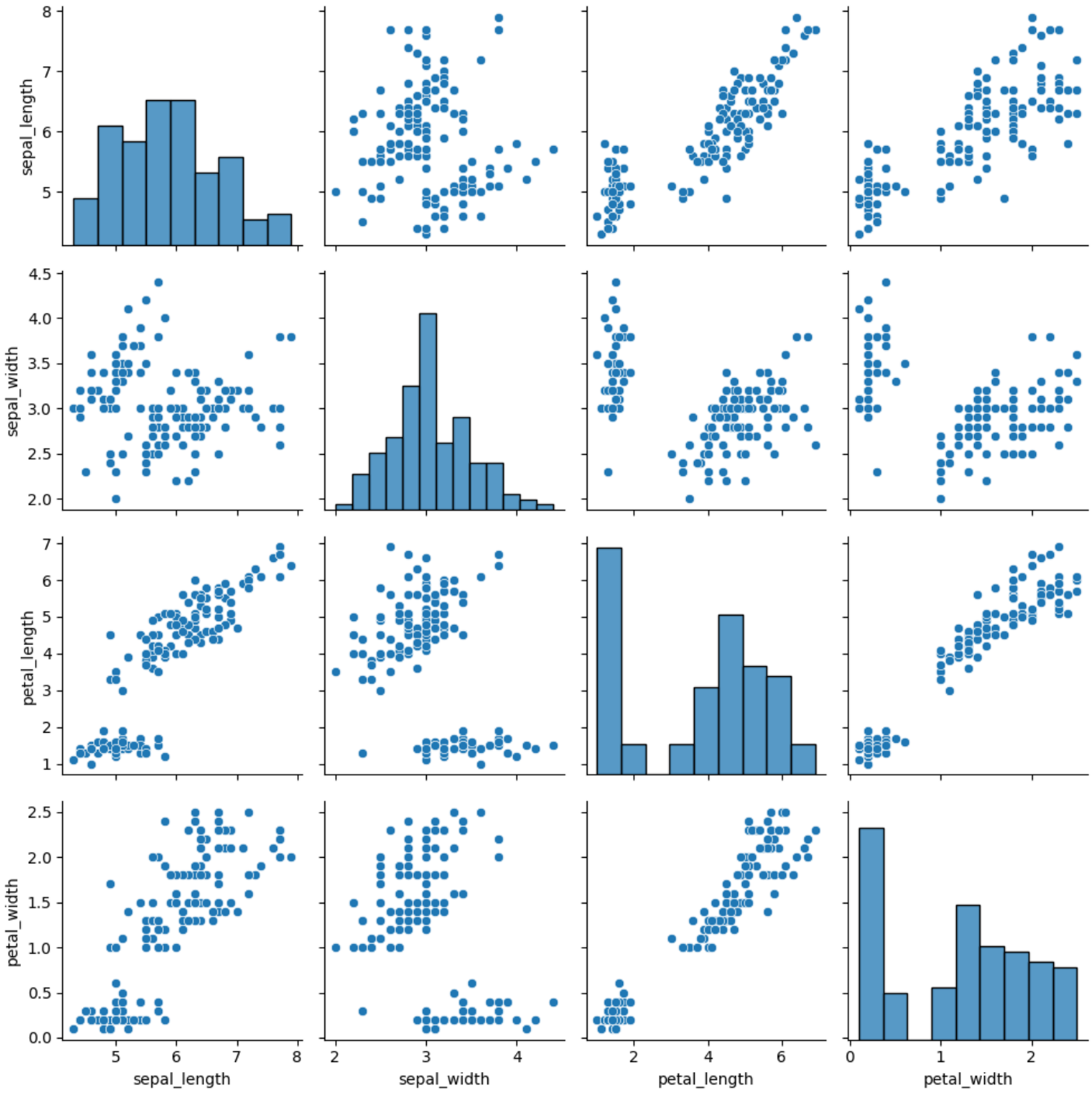

Histogram of petal_width
Frequency
petal_width
0
5
10
15
20
25
30
35
40
0.0
0.5
1.0
1.5
2.0
2.5

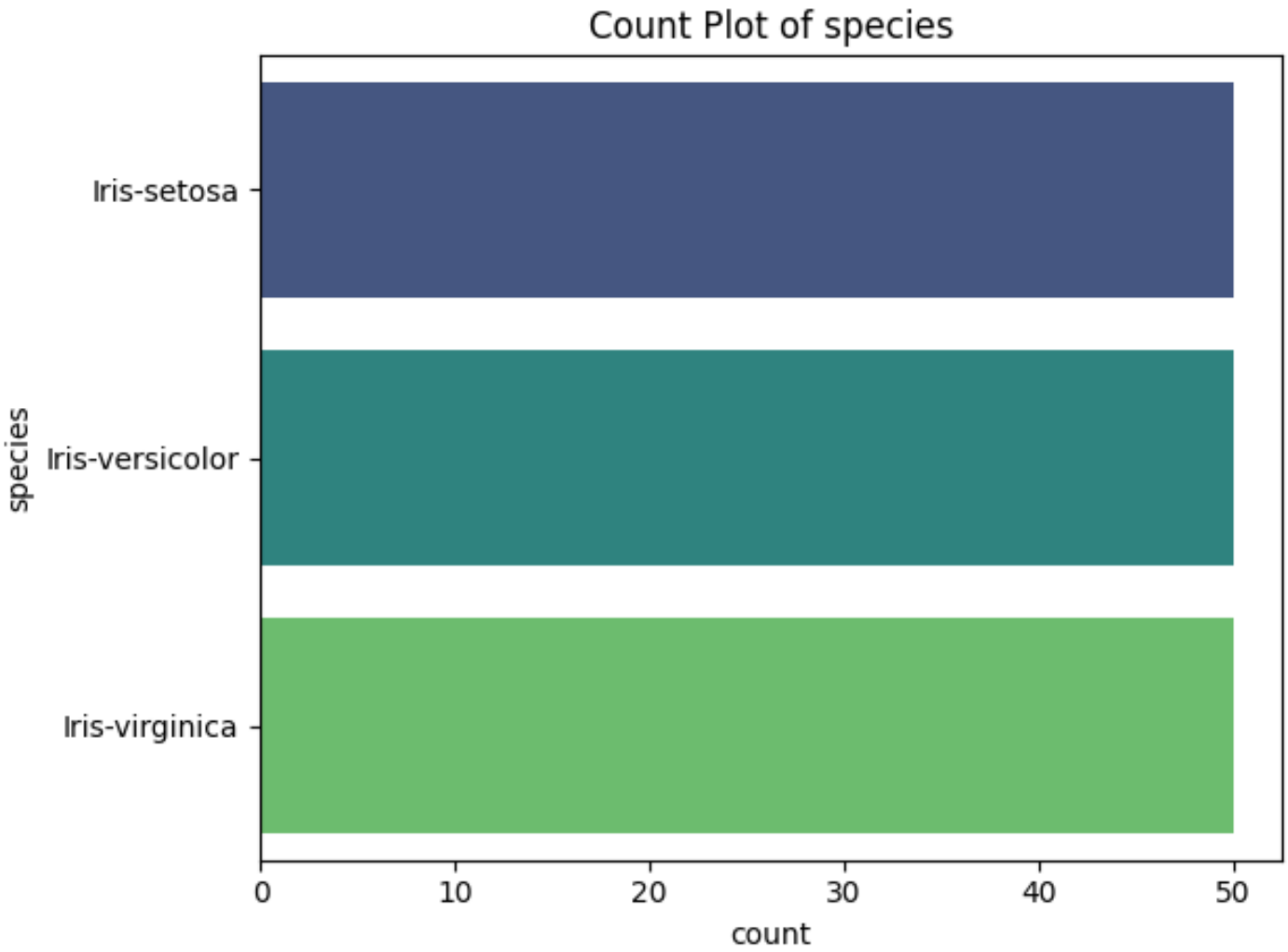

Boxplot of sepal_length
4.5
5.0
5.5
6.0
6.5
7.0
7.5
8.0
sepal_length


Boxplot of sepal_width
2.0
2.5
3.0
3.5
4.0
4.5
sepal_width


Boxplot of petal_length
1
2
3
4
5
6
7
petal_length


Boxplot of petal_width
0.0
0.5
1.0
1.5
2.0
2.5
petal_width


sepal_length
sepal_width
petal_length
petal_width


Count Plot of species
Iris-setosa
Iris-versicolor
Iris-virginica
species
0
10
20
30
40
50
count

Model Results

Model: Logistic Regression

accuracy: 1.0

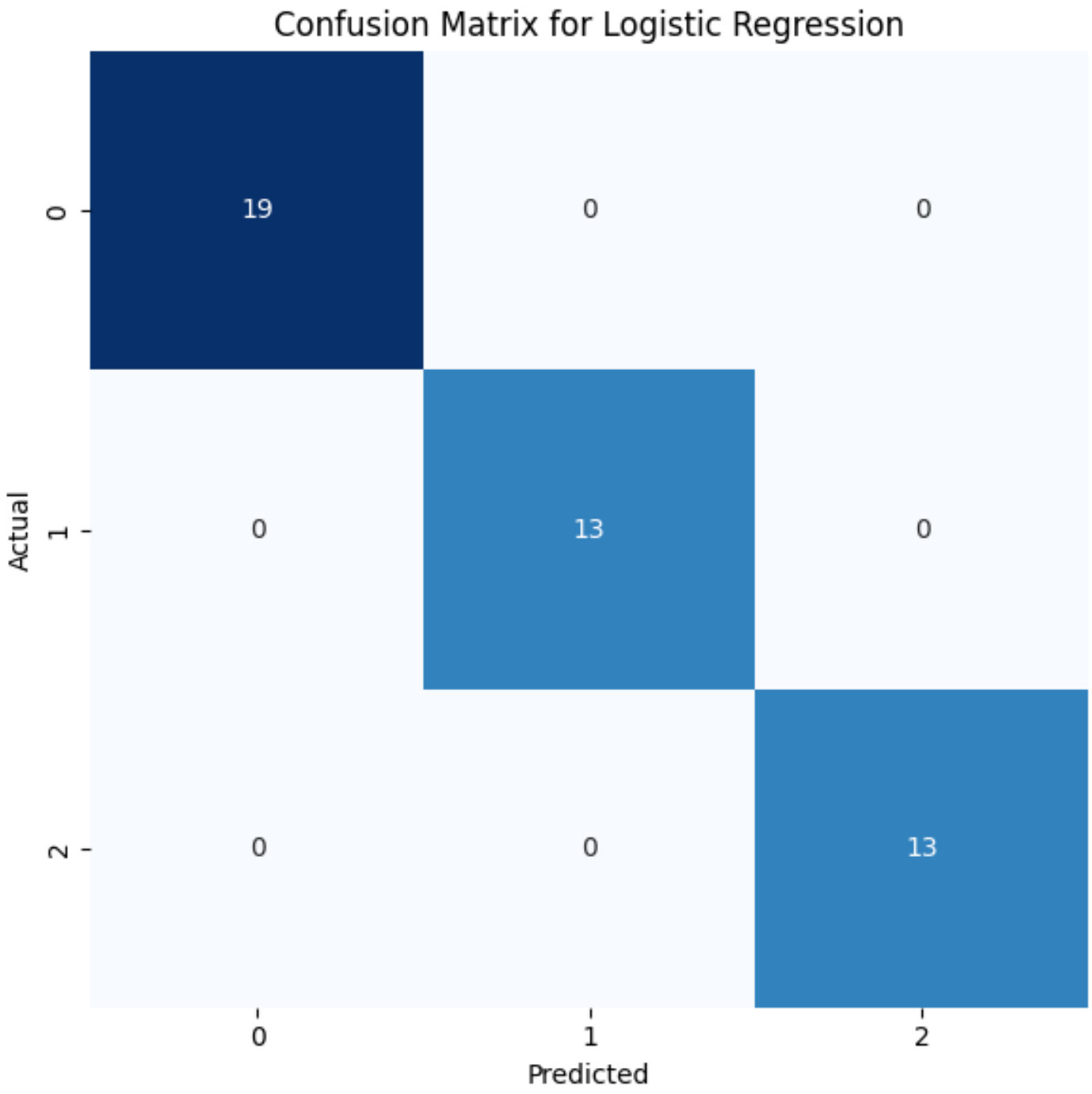
Model: Random Forest

accuracy: 1.0

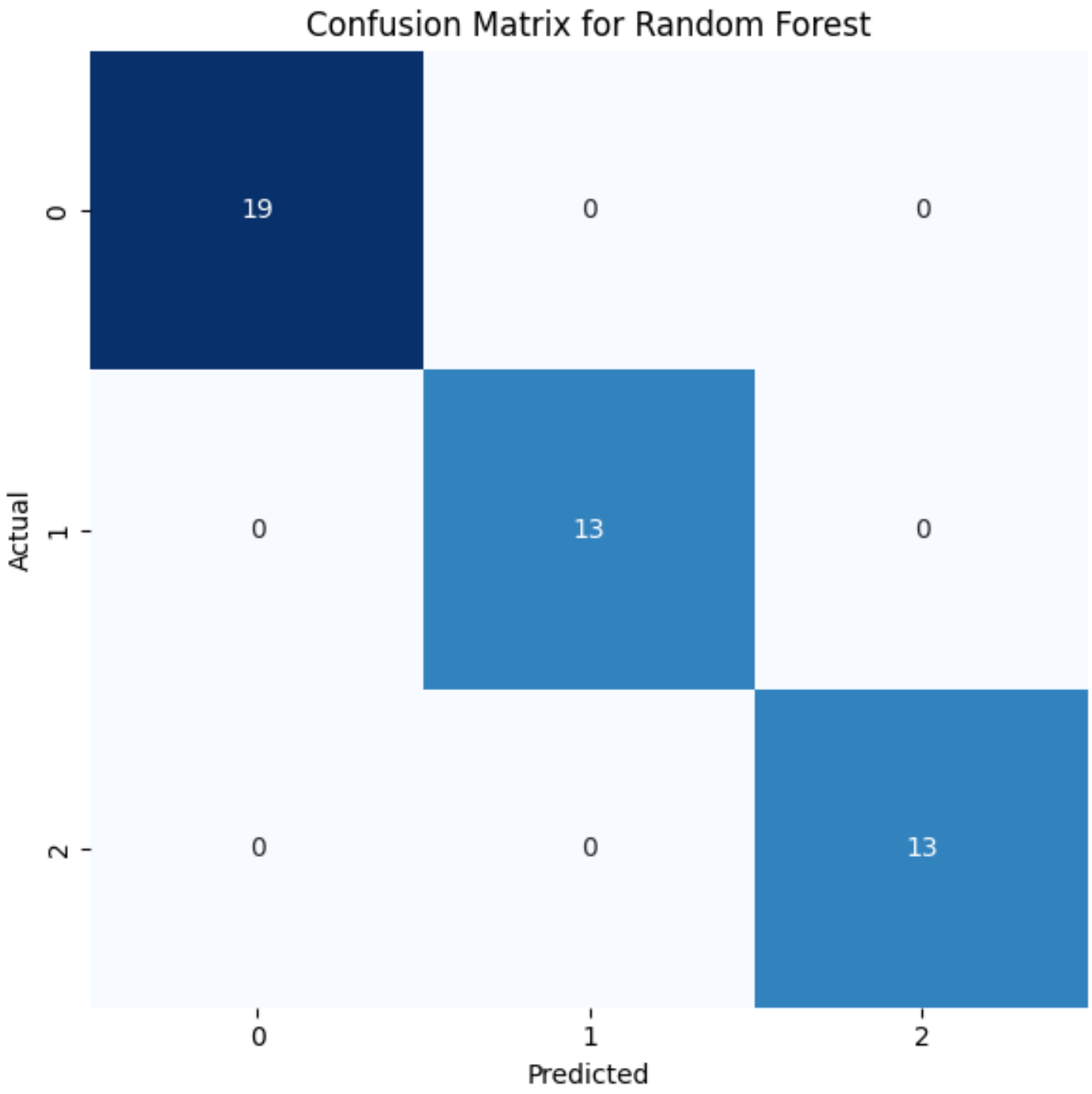
Model: Support Vector Machine

accuracy: 1.0

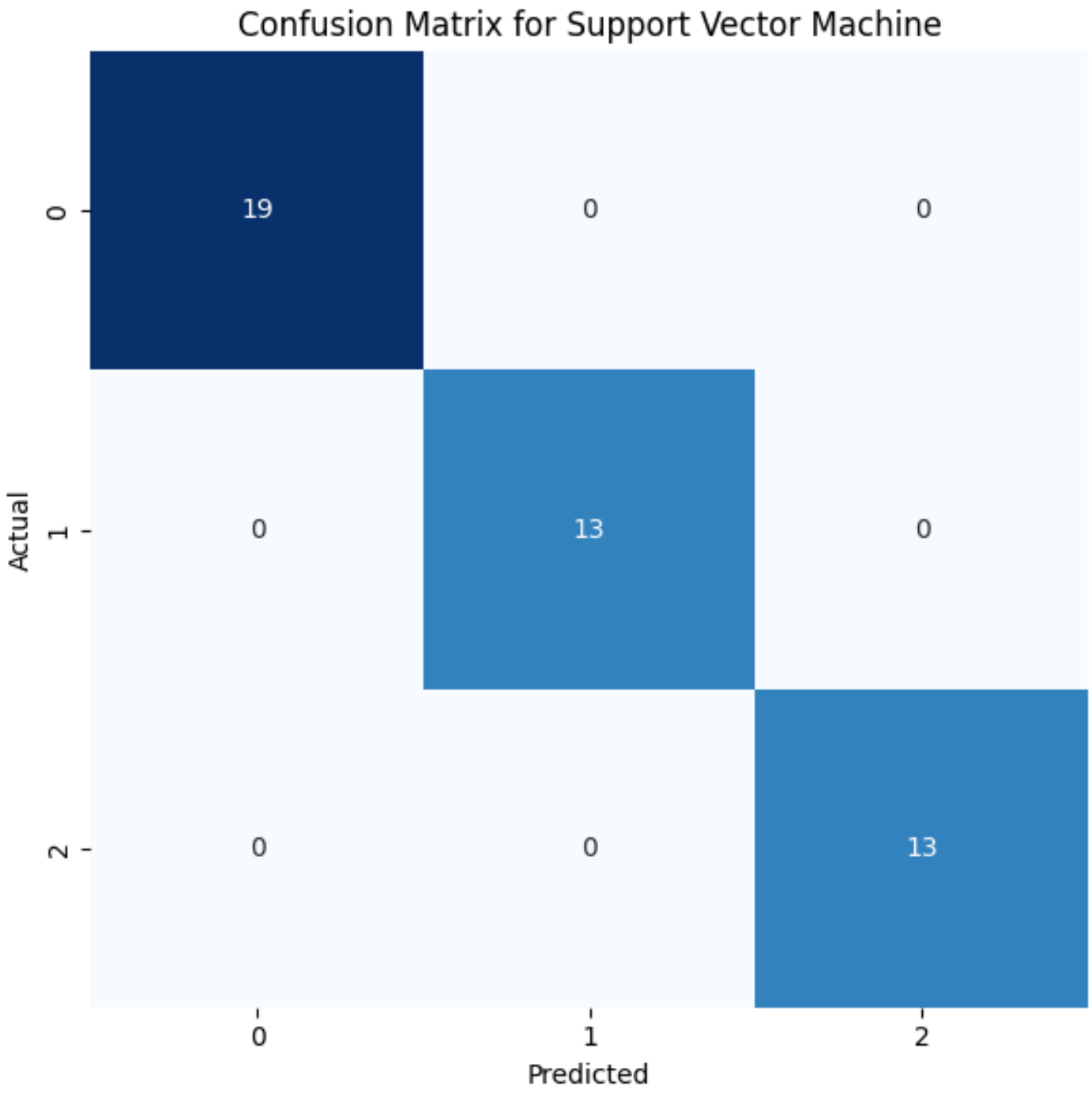
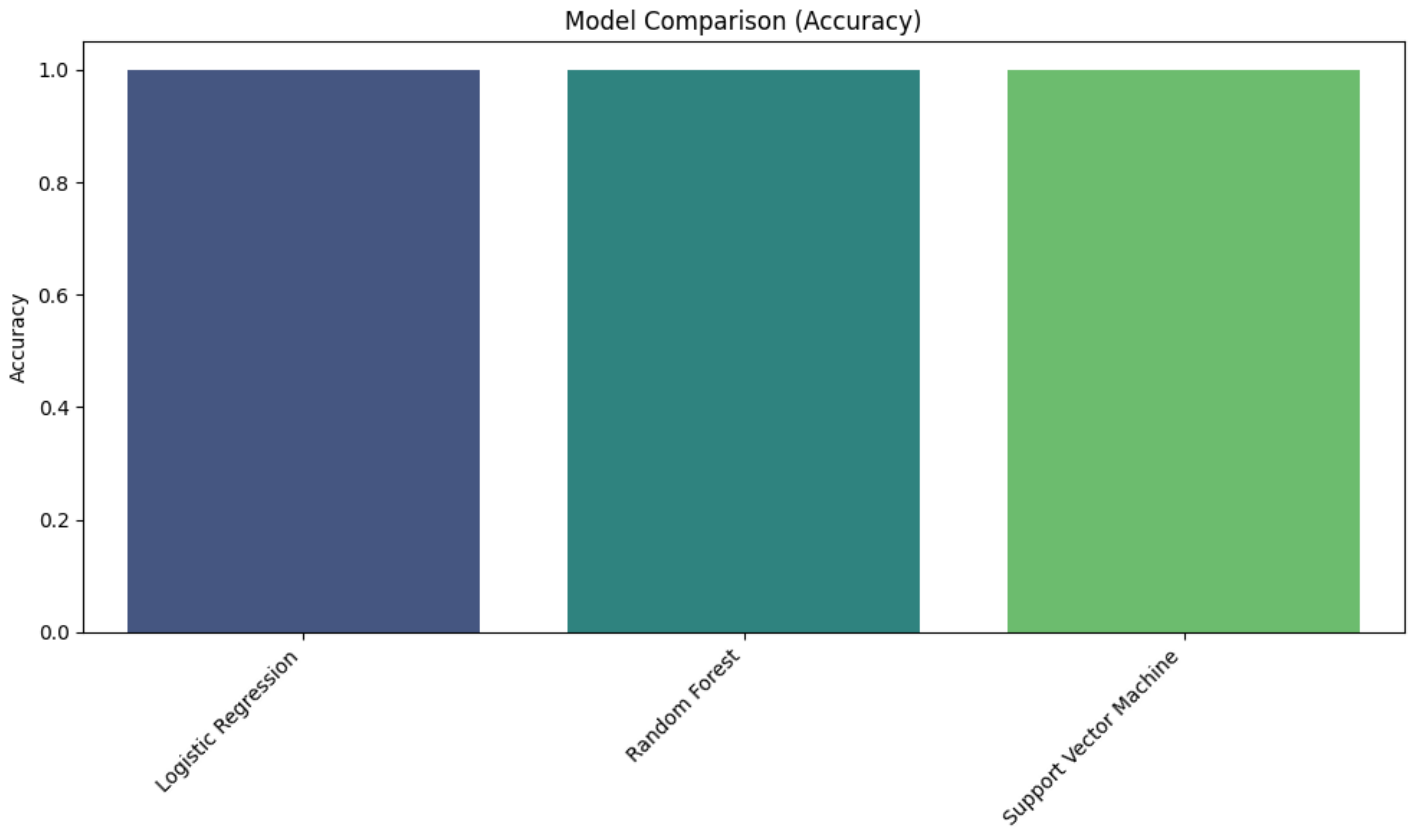
Confusion Matrix for Logistic Regression



Confusion Matrix for Random Forest



Confusion Matrix for Support Vector Machine



Model Comparison