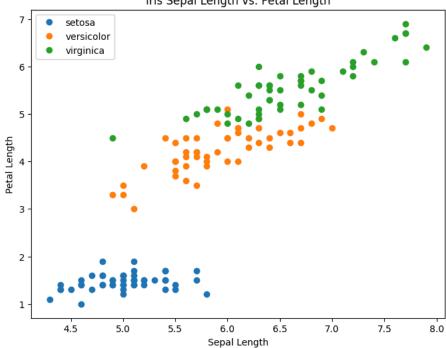
```
import pandas as pd
import numpy as np
from sklearn.datasets import load_iris
import matplotlib.pyplot as plt
iris = load_iris()
data = iris.data # Features
target_names = iris.target_names # Target names
df = pd.DataFrame(data= np.c_[iris['data'], iris['target']],
                  columns= iris['feature_names'] + ['target'])
# Line graph
plt.figure(figsize=(8,6))
for target in set(iris.target):
    subset = df[df['target'] == target]
    plt.plot(subset['sepal length (cm)'], subset['petal length (cm)'], marker='o', linestyle='', label=target_names[int(target)])
plt.xlabel('Sepal Length')
plt.ylabel('Petal Length')
plt.title('Iris Sepal Length vs. Petal Length')
plt.legend()
plt.show()
```

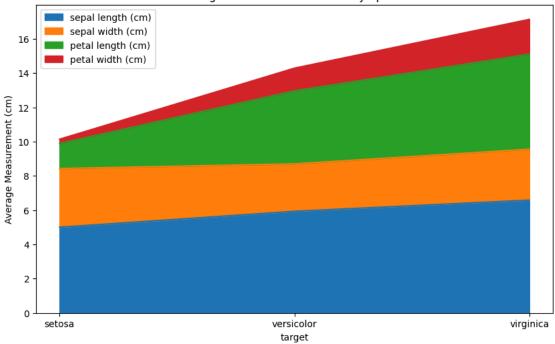
## $\supseteq$

## Iris Sepal Length vs. Petal Length

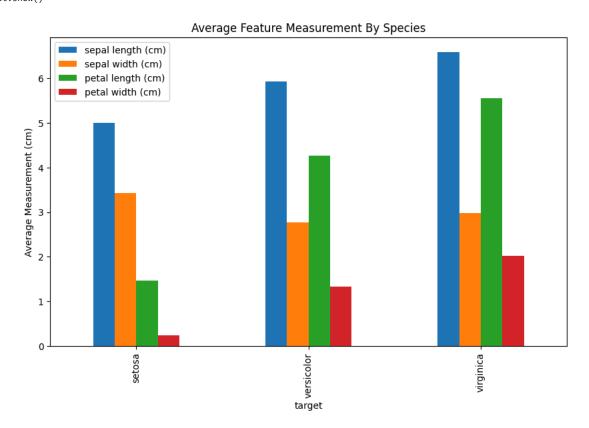


mean\_data.plot(kind='area', figsize=(10,6))
plt.title('Average Feature Measurement By Species')
plt.ylabel('Average Measurement (cm)')
plt.xticks([0,1,2], target\_names)
plt.show()

## Average Feature Measurement By Species

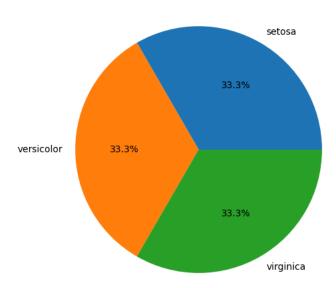


# Bar chart
mean\_data = df.groupby('target').mean()
mean\_data.plot(kind='bar', figsize=(10,6))
plt.title('Average Feature Measurement By Species')
plt.ylabel('Average Measurement (cm)')
plt.xticks([0,1,2], target\_names)
plt.show()



# Pie chart
target\_counts = df['target'].value\_counts()
plt.figure(figsize=(6,6))
plt.pie(target\_counts, labels=target\_names, autopct='%1.1f%%')
plt.title('Iris Species Distribution')
plt.show()

## Iris Species Distribution



Start coding or generate with AI.