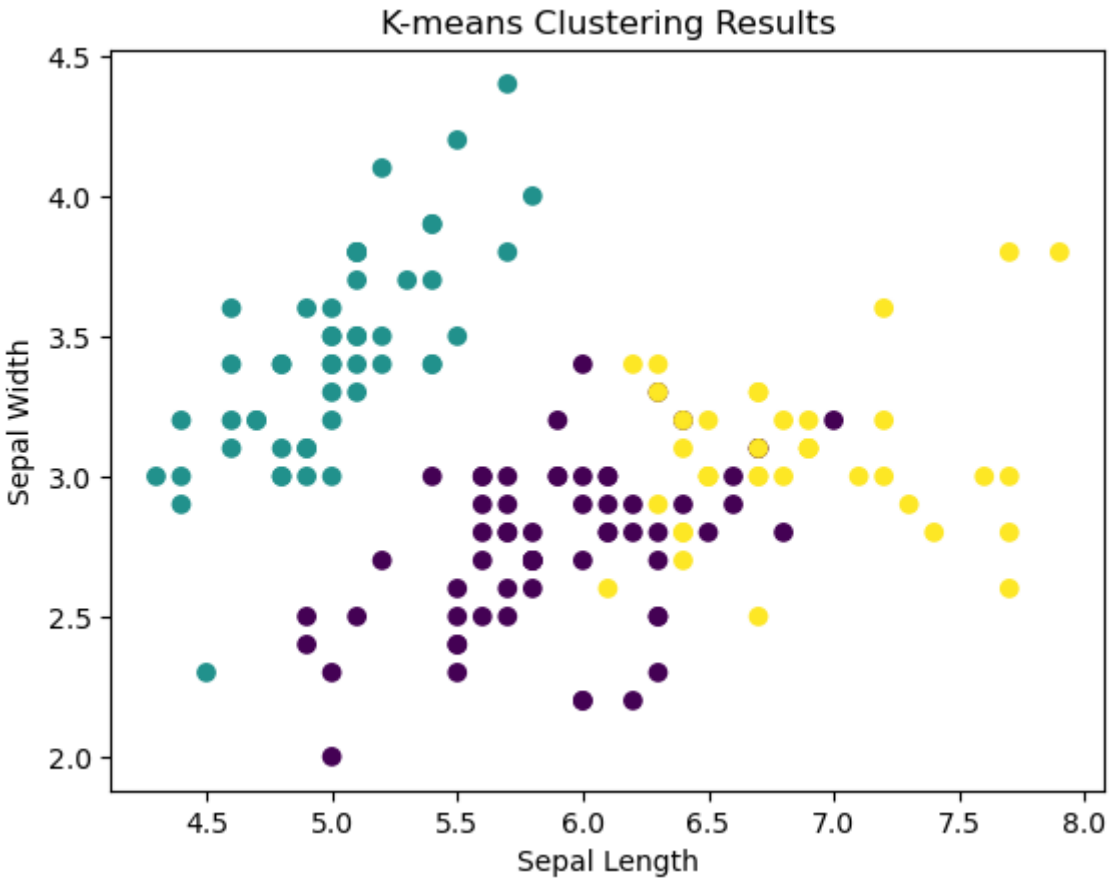
In [5]:
```
import numpy as np
import matplotlib.pyplot as plt
from sklearn.datasets import load_iris
from sklearn.cluster import KMeans
from sklearn.metrics import silhouette_score, homogeneity_score
iris = load_iris()
X = iris.data
n_clusters = 3
kmeans = KMeans(n_clusters=n_clusters, random_state=42)
kmeans.fit(X)
labels = kmeans.labels_
silhouette = silhouette_score(X, labels)
homogeneity = homogeneity_score(iris.target, labels)
print("Silhouette Score:", silhouette)
print("Homogeneity Score:", homogeneity)
plt.scatter(X[:, 0], X[:, 1], c=labels, cmap='viridis')
plt.xlabel('Sepal Length')
plt.ylabel('Sepal Width')
plt.title('K-means Clustering Results')
plt.show()
```

```
Silhouette Score: 0.5528190123564095
Homogeneity Score: 0.7514854021988339
```



In [ ]: