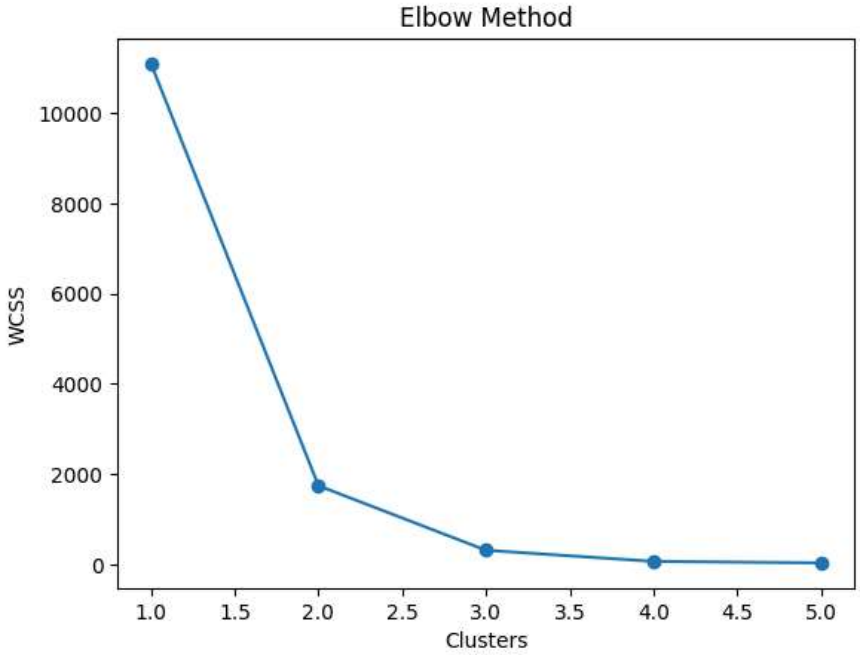
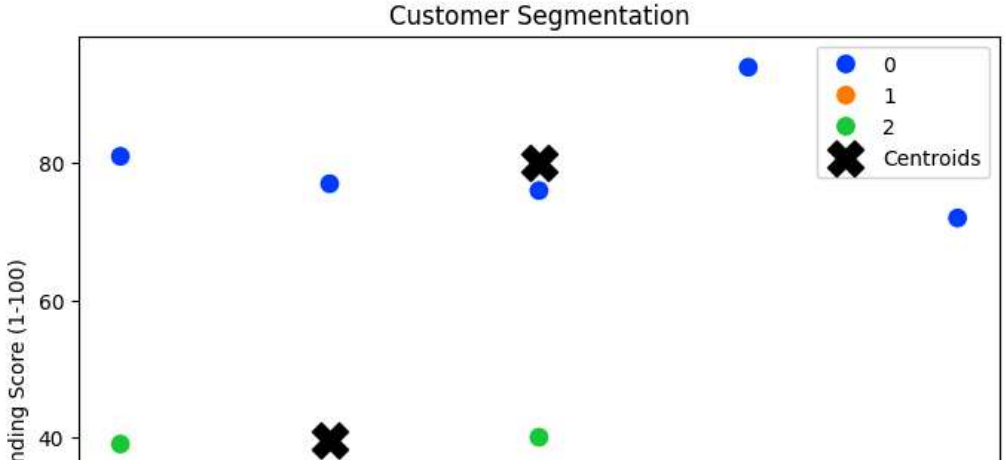
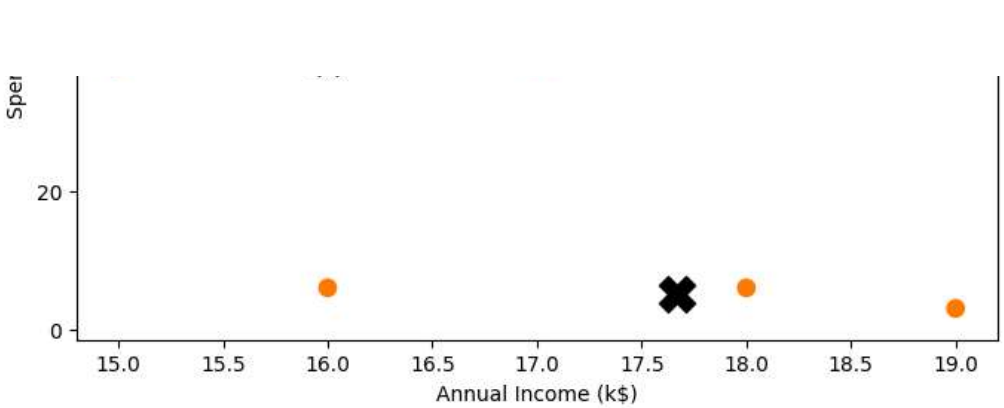
```
import pandas as pd
import matplotlib.pyplot as plt
from sklearn.cluster import KMeans
import seaborn as sns
from io import StringIO
data = """
CustomerID,Gender,Age,Annual Income (k$),Spending Score (1-100)
1,Male,19,15,39
2,Male,21,15,81
3,Female,20,16,6
4,Female,23,16,77
5,Female,31,17,40
6,Female,22,17,76
7,Female,35,18,6
8,Female,23,18,94
9,Male,64,19,3
10,Male,30,19,72
"""
df = pd.read_csv(StringIO(data))

print(df)
X = df[['Annual Income (k$)', 'Spending Score (1-100)']]
wcss = []
for i in range(1, 6):
    kmeans = KMeans(n_clusters=i, random_state=42, n_init=10)
    kmeans.fit(X)
    wcss.append(kmeans.inertia_)

plt.plot(range(1, 6), wcss, marker='o')
plt.title('Elbow Method')
plt.xlabel('Clusters')
plt.ylabel('WCSS')
plt.show()
kmeans = KMeans(n_clusters=3, random_state=42, n_init=10)
y_kmeans = kmeans.fit_predict(X)
plt.figure(figsize=(8, 6))
sns.scatterplot(x=X['Annual Income (k$)'], y=X['Spending Score (1-100)'],
                hue=y_kmeans, palette='bright', s=100)
plt.scatter(kmeans.cluster_centers_[:, 0], kmeans.cluster_centers_[:, 1],
            s=300, c='black', marker='X', label='Centroids')
plt.title('Customer Segmentation')
plt.xlabel('Annual Income (k$)')
plt.ylabel('Spending Score (1-100)')
plt.legend()
plt.show()
```

	CustomerID	Gender	Age	Annual Income (k$)	Spending Score (1-100)
0	1	Male	19	15	39
1	2	Male	21	15	81
2	3	Female	20	16	6
3	4	Female	23	16	77
4	5	Female	31	17	40
5	6	Female	22	17	76
6	7	Female	35	18	6
7	8	Female	23	18	94
8	9	Male	64	19	3
9	10	Male	30	19	72






20
0
15.0
15.5
16.0
16.5
17.0
17.5
18.0
18.5
19.0
Annual Income (k$)