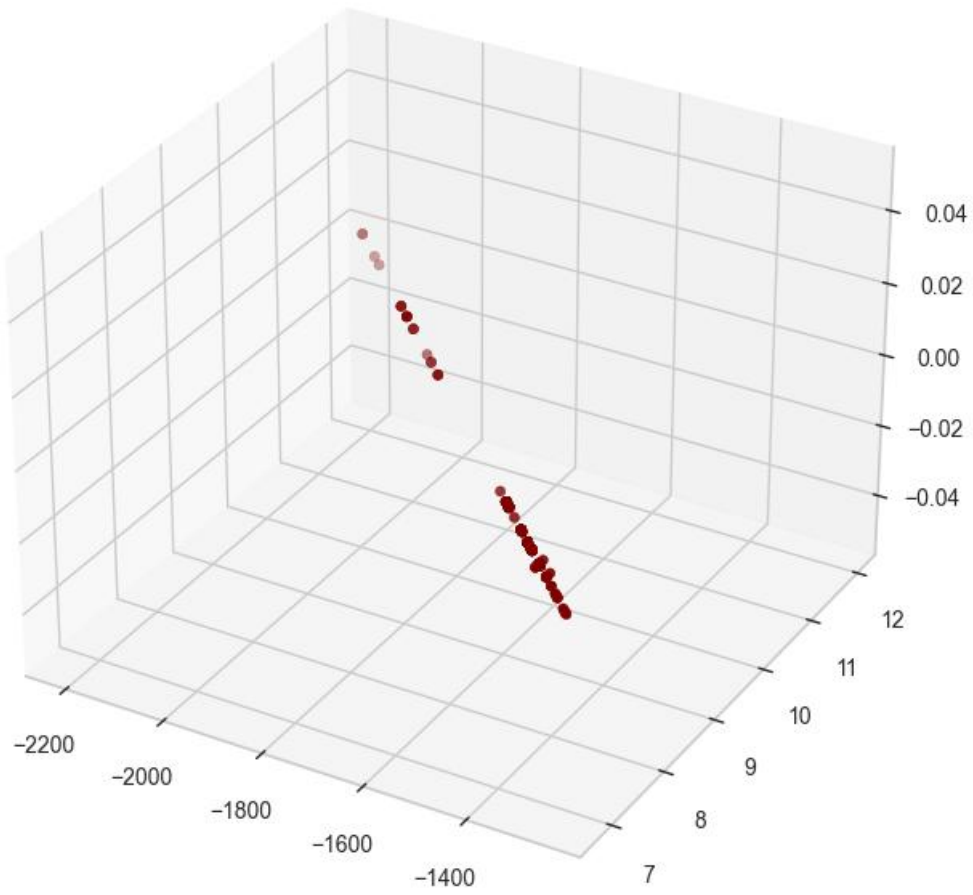
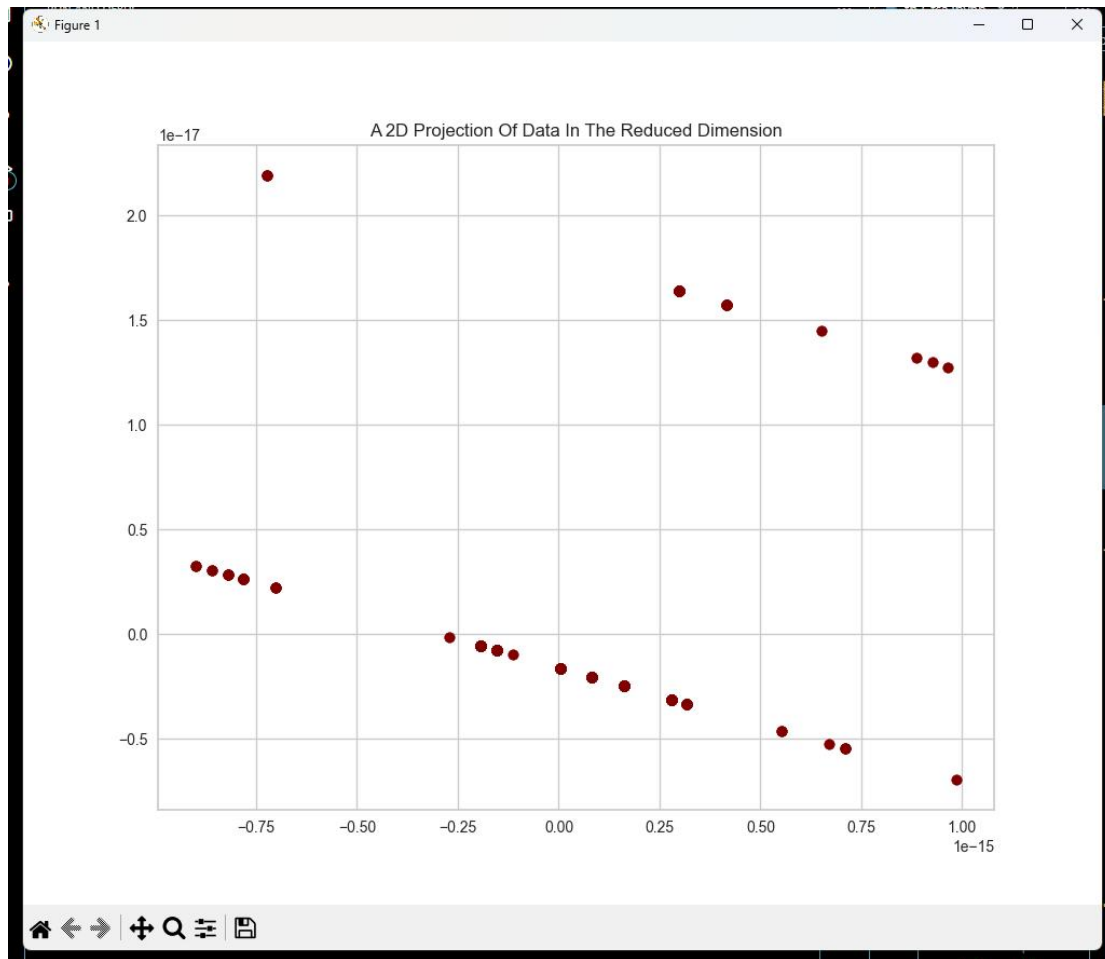
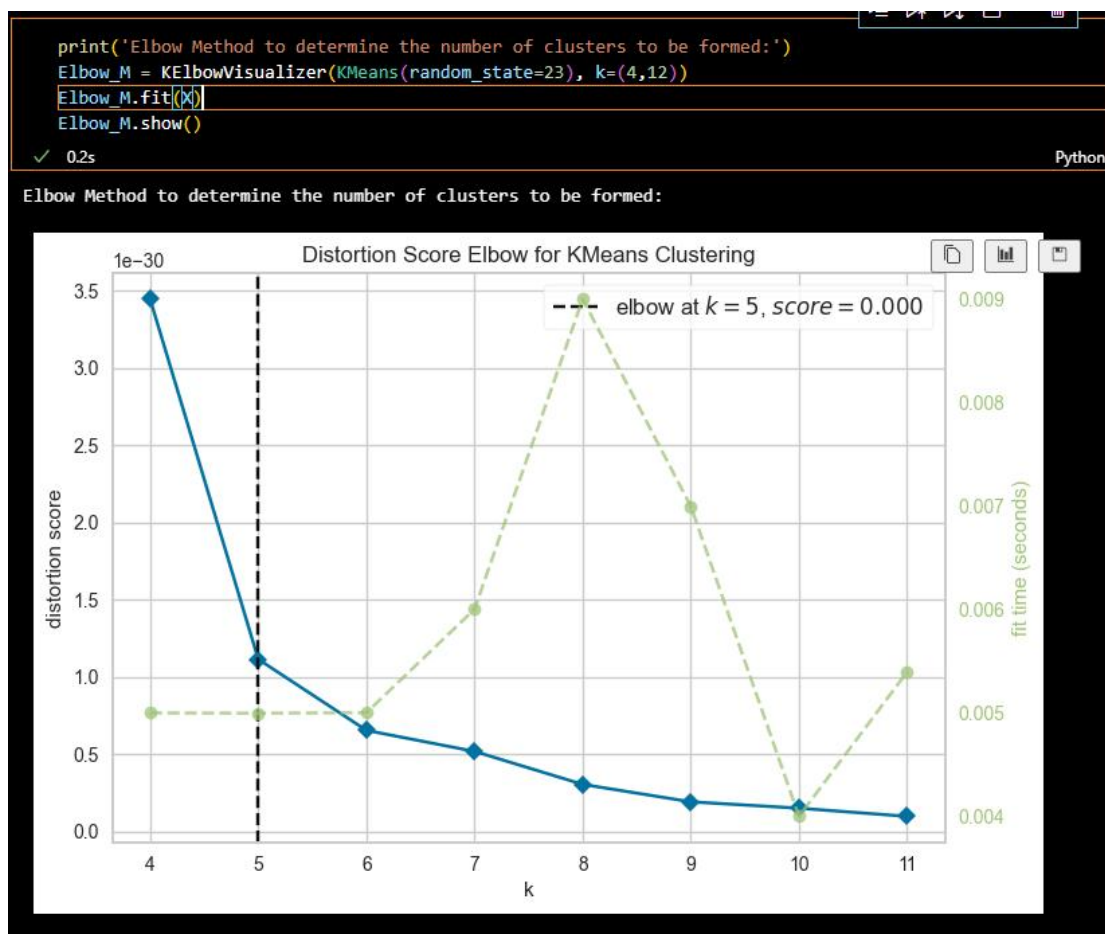
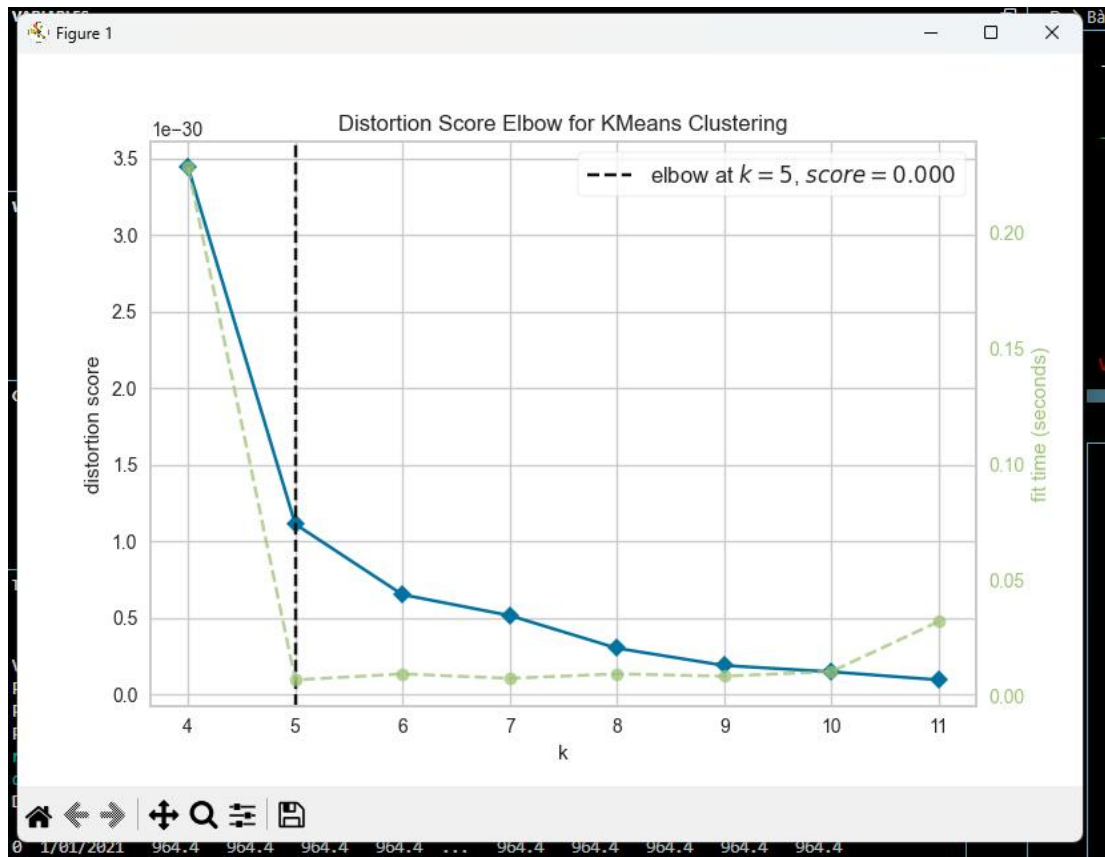


A 3D Projection Of Data In The Reduced Dimension

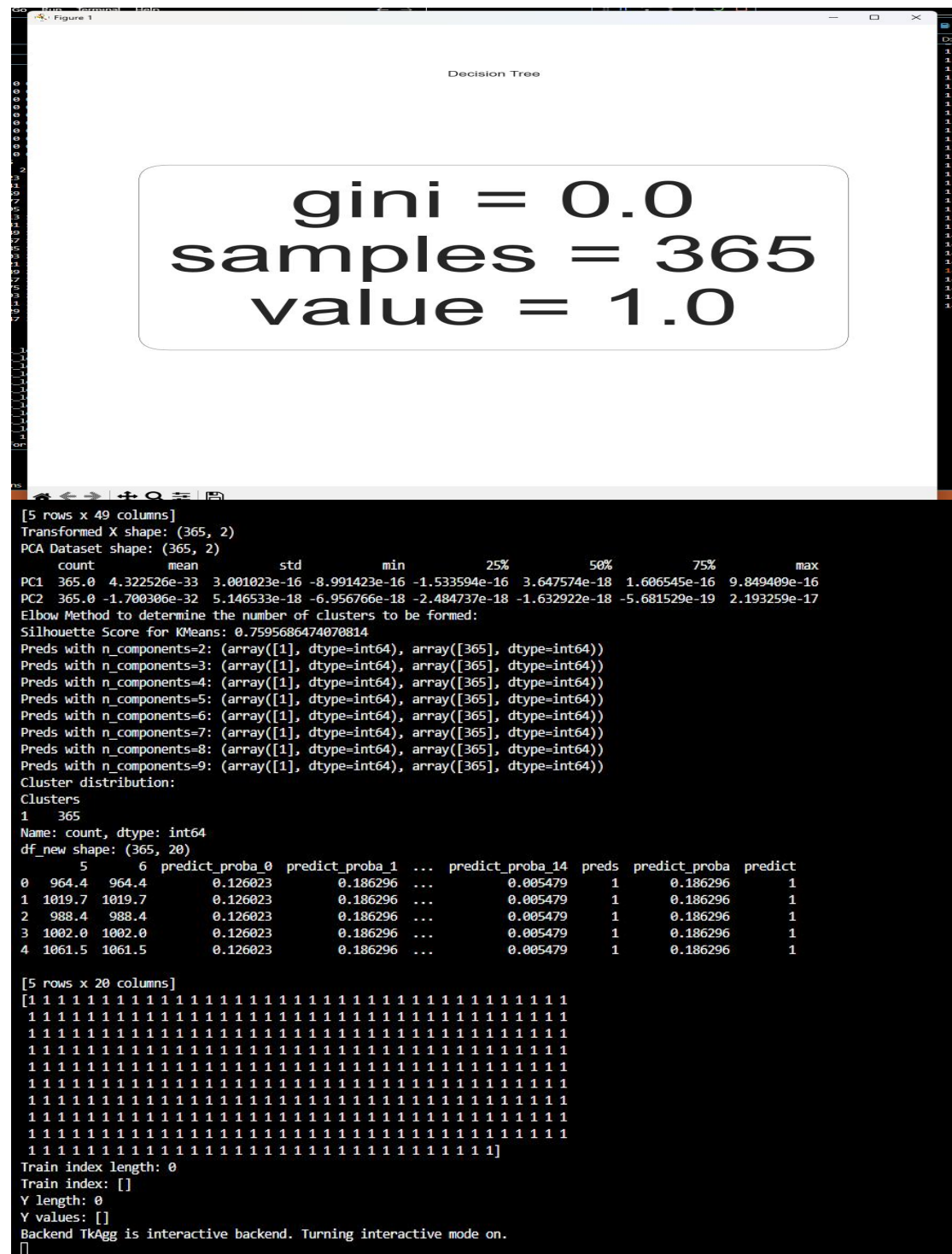




```
# Elbow Method để xác định số cụm cần tạo
print('Elbow Method to determine the number of clusters to be formed:')
Elbow_M = KElbowVisualizer(KMeans(random_state=23), k=(4, 12))
Elbow_M.fit(X)
Elbow_M.show()
```



**Với K cụm  $\geq 3$**



**Với K cụm = 2**

[illegible]



