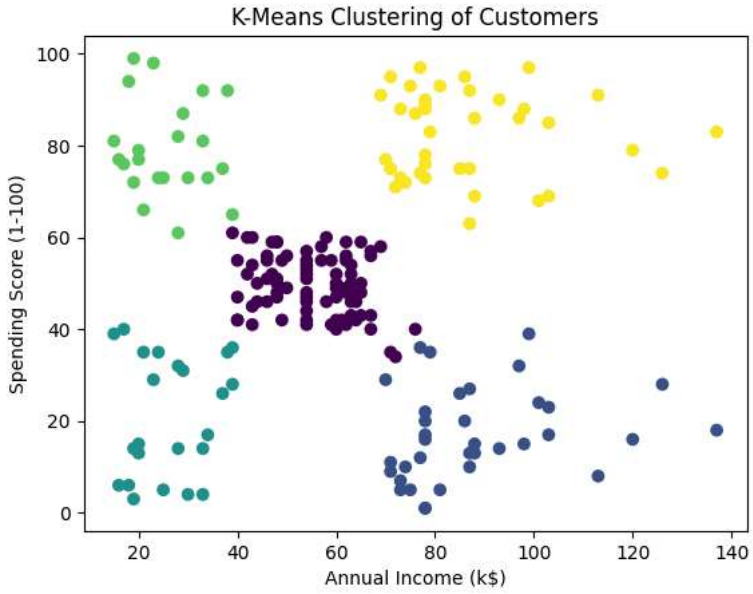
```
import pandas as pd
from sklearn.cluster import KMeans
from sklearn.preprocessing import StandardScaler
import matplotlib.pyplot as plt

df = pd.read_csv('/Mall_Customers.csv')

features = ['Annual Income (k$)', 'Spending Score (1-100)']
X = df[features]

scaler = StandardScaler()
X_scaled = scaler.fit_transform(X)

n_clusters = 5

kmeans = KMeans(n_clusters=n_clusters, random_state=42)
df['Cluster'] = kmeans.fit_predict(X_scaled)

plt.scatter(df['Annual Income (k$)'], df['Spending Score (1-100)'], c=df['Cluster'], cmap='viridis')
plt.xlabel('Annual Income (k$)')
plt.ylabel('Spending Score (1-100)')
plt.title('K-Means Clustering of Customers')
plt.show()

print(df[['CustomerID', 'Cluster']])
```

```
/usr/local/lib/python3.10/dist-packages/sklearn/cluster/_kmeans.py:870: FutureWarning: T
  warnings.warn(
```




```
     CustomerID  Cluster
0             1        2
1             2        3
2             3        2
3             4        3
4             5        2
..          ...      ...
195         196        4
196         197        1
197         198        4
198         199        1
199         200        4

[200 rows x 2 columns]
```