main.py | Output

```
import pandas as pd import numpy as np
    import matplotlib.pyplot as plt from
    sklearn.cluster import KMeans from
    sklearn.preprocessing import
    StandardScaler
np.random.seed(42) customers = pd
    .DataFrame({ 'Groceries': np.random
    .randint(200, 2000, 100), 'Clothing'
    : np.random.randint(100, 1500, 100),
    'Electronics': np.random.randint(50,
    3000, 100) })
X = StandardScaler().fit_transform
    (customers)
kmeans = KMeans(n_clusters=3,
    random_state=42)
    customers['Cluster'] = kmeans
    .fit_predict(X)
plt.scatter(customers['Groceries'],
    customers['Electronics'], c
    =customers['Cluster'], cmap
    ='viridis') plt.xlabel('Groceries')
    plt.ylabel('Electronics') plt.show()
```

Run