

**Ex.No-12****Unsupervised Learning – Clustering****Aim:**

To implement unsupervised learning-clustering using any predefined dataset

**Description:**

- Unsupervised learning don't have any target/outcome variable to predict /estimate.
- it is used for clustering population in different groups, which is widely used for segmenting customers in different groups
- Ex. Apriori algorithm , K-means

**Program:**

```
# Importing Modules
from sklearn import datasets
import matplotlib.pyplot as plt

# Loading dataset
iris_df = datasets.load_iris()

# Available methods on dataset
print("Methods:\n",dir(iris_df))

# Features
print("\nFeatures:\n",iris_df.feature_names)

# Targets
print("\nTargets:\n",iris_df.target)

# Target Names
print("\nTarget names:\n",iris_df.target_names)

label = {0: 'red', 1: 'blue', 2: 'green'}
```

The programs were run successfully