

Untitled * - Orange

File Edit View Widget Window Options Help

Filter...

Data

File CSV File Import Datasets SQL Table

Data Table Paint Data Data Info Rank

Edit Domain Color Feature Statistics Save Data

Transform

Data Sampler Select Columns Select Rows Transpose

Python Script

Write a Python script and run it on input data or models.

100%

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100

Datasets Distances Hierarchical Clustering Scatter Plot

Datasets (1) Python Script for divisive hierarchical clustering Data Table Edit Domain Scatter Plot (1)

Datasets - Orange

Search for data set ... Show data sets in English

| Title | Size | Instances | Variables | Target | Tags |
|---------------------------------------|----------|-----------|-----------|---------------|--------------------------------------|
| Iris | 4.5 KB | 150 | 5 | C categorical | biology |
| BBC3 | 2.6 MB | 1407 | 3 | C categorical | text, classification, news |
| Breast Cancer and Docetaxel Treatment | 1.8 MB | 24 | 9486 | C categorical | biology |
| Smoking effect on B lymphocytes | 1.8 MB | 79 | 3001 | C categorical | genomics |
| HDI | 45.2 KB | 188 | 54 | ? none | economy, geo |
| ParlaMint | 1.7 MB | 1000 | 18 | C categorical | text, classification, time, politics |
| SentiNews | 5.0 MB | 2000 | 8 | C categorical | text, sentiment |
| TKI resistance | 1.2 MB | 280 | 468 | C categorical | spectral |
| Abalone | 187.5 KB | 4177 | 9 | N numeric | biology |
| Adult Census Income | 5.3 MB | 48842 | 15 | C categorical | economy, fairness |
| Ames Iowa Housing | 831.2 KB | 2930 | 81 | N numeric | economy |
| Roman Amphorae | 23.7 KB | 164 | 16 | C categorical | archaeology, image analytics |

Description

Iris (1936), from [UCI ML Repository](#)

The Iris flower data set or Fisher's Iris data set was introduced by the British statistician and biologist Ronald Fisher in his 1936 paper as an example of linear discriminant analysis. The data on length and width of petal and sepal leaves was actually collected by American botanist Edgar Anderson to quantify the morphologic variation of Iris flowers of three related species.

References

R. A. Fisher (1936) The use of multiple measurements in taxonomic problems. *Annals of Eugenics* 7(2):179-188.

150

Datasets - Orange

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Python Script for divisive hierarchical clustering - Orange

Preferences
☐ Vim mode

Library
Table from numpy

+ - Update More

Editor

```
def python_script(in_data):
1  import numpy as np
2  import pandas as pd
3  from sklearn.cluster import KMeans
4  from sklearn.preprocessing import StandardScaler
5  from Orange.data import Table, Domain, ContinuousVariable
6
7  # Get input data from Orange
8  data = in_data.X # Feature matrix
9  domain = in_data.domain # Original domain
10
11 # Standardize the data
12 scaler = StandardScaler()
13 data_scaled = scaler.fit_transform(data)
14
15 # Perform KMeans clustering
16 kmeans = KMeans(n_clusters=2, n_init=10)
17 labels = kmeans.fit_predict(data_scaled)
18
19 return out_data, out_learner, out_classifier, out_object
```

Console

```
Running script:
>>>
Running script:
>>>
```

Run

150 | - | - 150 | - | -

Data Table - Orange

Info
150 instances (no missing data)
5 features
No target variable.
No meta attributes.

Variables
☒ Show variable labels (if present)
☐ Visualize numeric values
☒ Color by instance classes

Selection
☒ Select full rows

Restore Original Order

☒ Send Automatically

| | sepal length | sepal width | petal length | petal width | Cluster |
|----|--------------|-------------|--------------|-------------|---------|
| 37 | -0.416 | 1.032 | -1.398 | -1.313 | 0 |
| 38 | -1.143 | 0.106 | -1.284 | -1.444 | 0 |
| 39 | -1.749 | -0.125 | -1.398 | -1.313 | 0 |
| 40 | -0.901 | 0.801 | -1.284 | -1.313 | 0 |
| 41 | -1.022 | 1.032 | -1.398 | -1.182 | 0 |
| 42 | -1.628 | -1.745 | -1.398 | -1.182 | 0 |
| 43 | -1.749 | 0.338 | -1.398 | -1.313 | 0 |
| 44 | -1.022 | 1.032 | -1.228 | -0.787 | 0 |
| 45 | -0.901 | 1.726 | -1.057 | -1.050 | 0 |
| 46 | -1.264 | -0.125 | -1.341 | -1.182 | 0 |
| 47 | -0.901 | 1.726 | -1.228 | -1.313 | 0 |
| 48 | -1.507 | 0.338 | -1.341 | -1.313 | 0 |
| 49 | -0.658 | 1.495 | -1.284 | -1.313 | 0 |
| 50 | -1.022 | 0.569 | -1.341 | -1.313 | 0 |
| 51 | 1.402 | 0.338 | 0.535 | 0.265 | 1 |
| 52 | 0.675 | 0.338 | 0.422 | 0.396 | 1 |
| 53 | 1.280 | 0.106 | 0.649 | 0.396 | 1 |
| 54 | -0.416 | -1.745 | 0.137 | 0.133 | 1 |
| 55 | 0.796 | -0.588 | 0.478 | 0.396 | 1 |
| 56 | -0.174 | -0.588 | 0.422 | 0.133 | 1 |
| 57 | 0.553 | 0.569 | 0.535 | 0.528 | 1 |
| 58 | -1.143 | -1.513 | -0.261 | -0.261 | 1 |
| 59 | 0.917 | -0.356 | 0.478 | 0.133 | 1 |

150 | - 150 | 150

Edit Domain - Orange

Variables

Filter...

- N sepal length
- N sepal width
- N petal length
- N petal width
- C Cluster (reinterpreted as categorical)

Edit

Name: Cluster

Type: Categorical

☐ Unlink variable from its source variable

Values: 0.0 → 0
1.0 → 1

Labels: Key Value

Output table name: untitled

Reset All Reset Selected Apply

150 | 150

