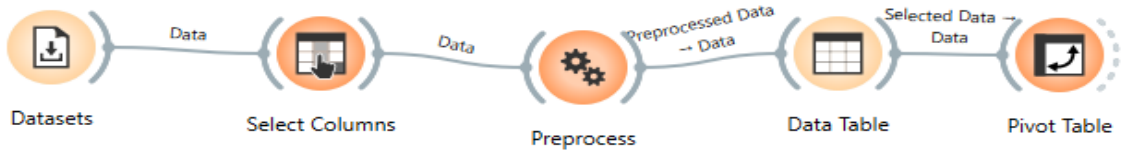
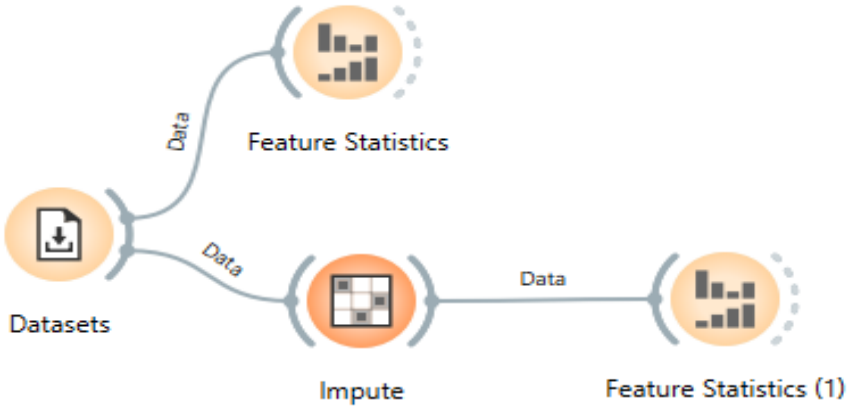
Exp -1 DATA PRE-PROCESSING AND DATA CUBE



dataset: adult

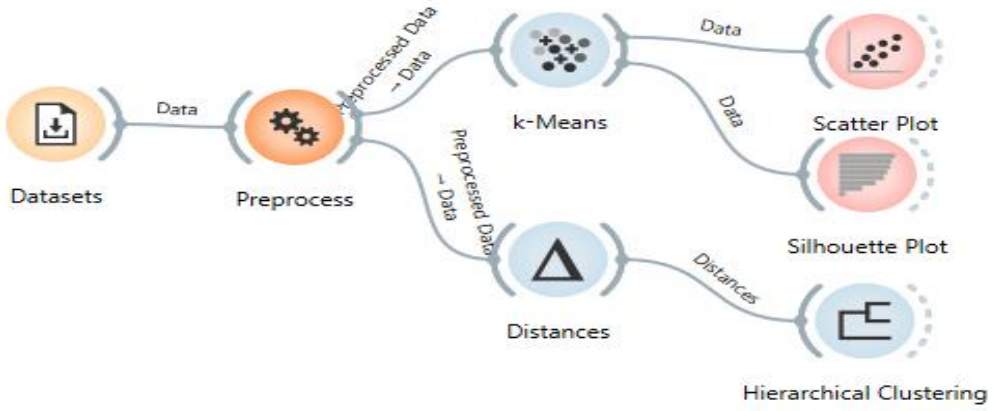
Exp – 2 DATA CLEANING



Dataset: baker’s yeast

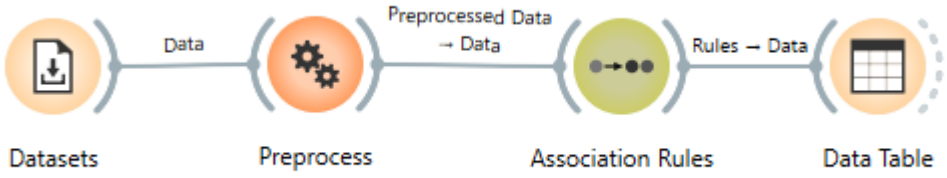
Exp – 3 EXPLORATORY ANALYSIS

k-means & mst:



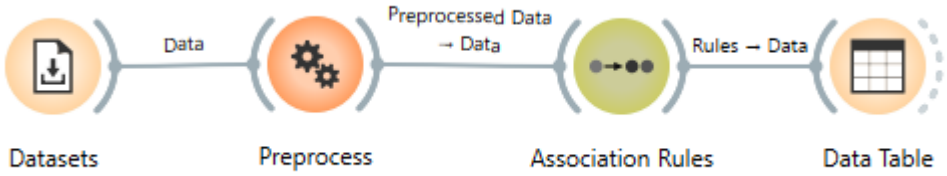
dataset: iris

Exp – 4 ASSOCIATION ANALYSIS



Dataset: market basket

Exp – 5 HYPOTHESIS GENERATION



Dataset: market basket

Exp – 6 TRANSFORMATION TECHNIQUES

Haar:

Code:

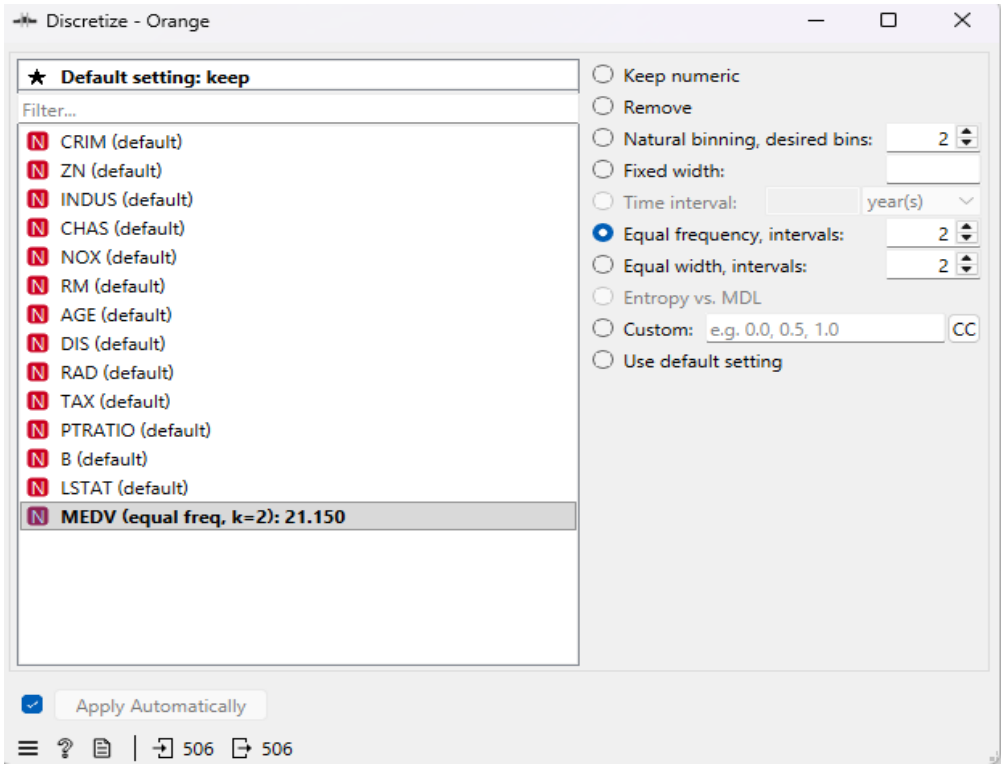
```
import numpy as np
from Orange.data import Table, Domain, ContinuousVariable

data = np.array(in_data.X)
haar = [[r.mean(), r.std(), r.max()-r.min(), np.sqrt((r**2).sum())] for r in data]
out_data = Table(Domain([ContinuousVariable(f"Haar_{i+1}") for i in range(4)]),
np.array(haar))

print("Haar transform done")
```

PCA:

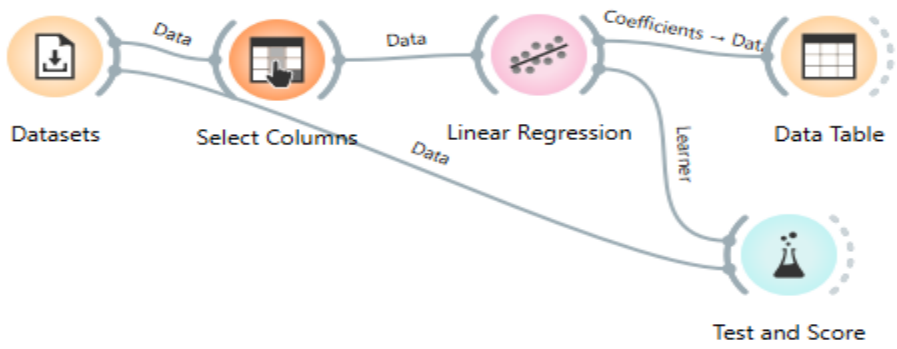
Dataset: Housing

Exp – 7 DATA VISUALIZATION

Binning:

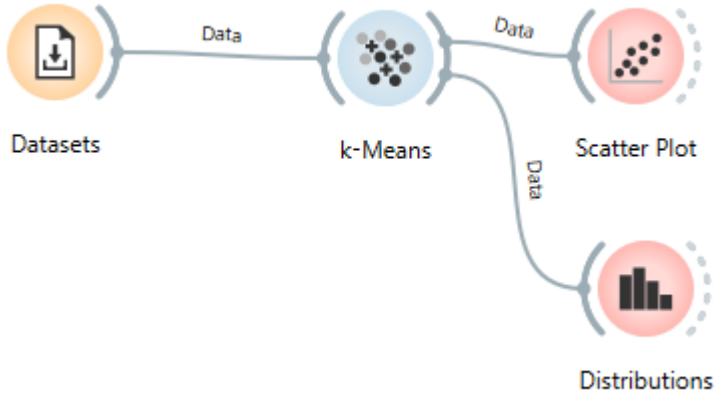


Linear regression:



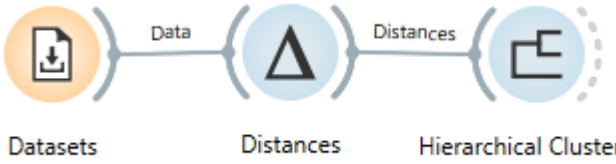
Dataset: Housing

Exp – 8 CLUSTERS ASSESSMENT



Dataset: iris

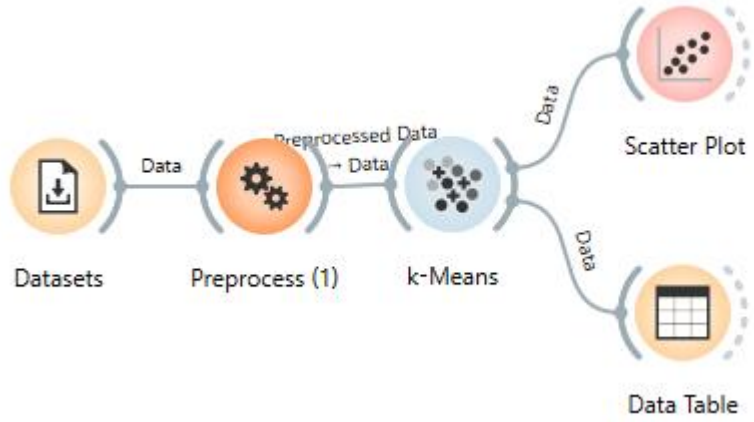
Exp - 9 HIERARCHICAL CLUSTERING



Dataset: iris

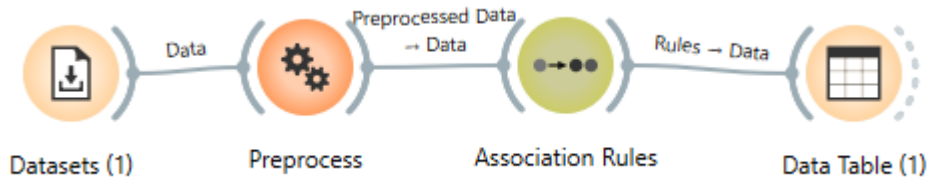
Exp – 10 SCALABILITY ALGORITHMS

Scalable Clustering (K-Means)



Dataset:iris

Scalable Apriori Algorithm (Association Rules)



Dataset – market basket