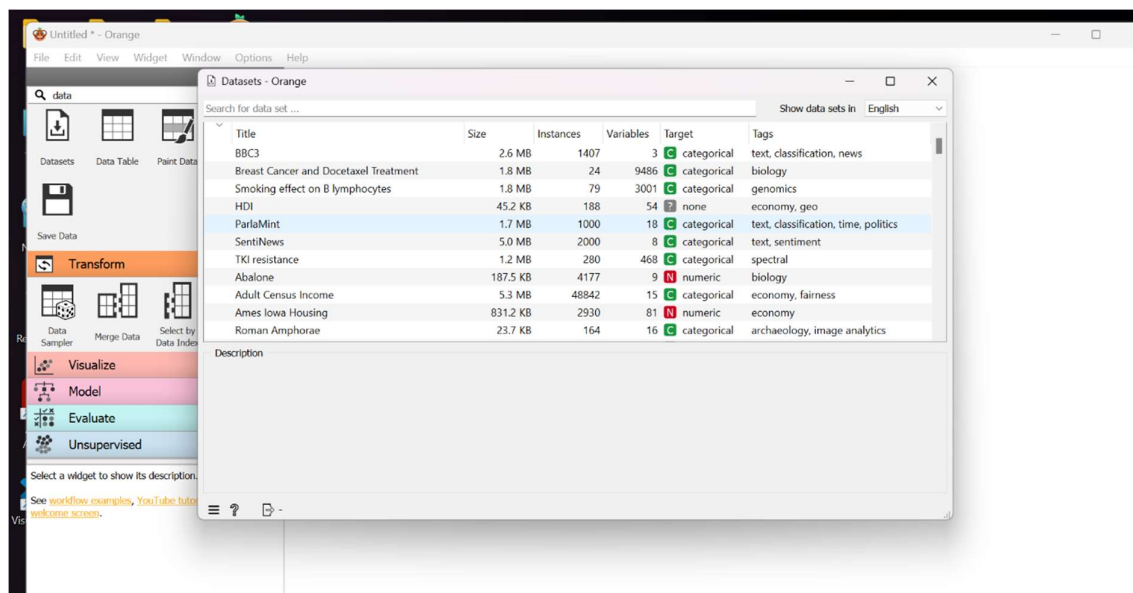
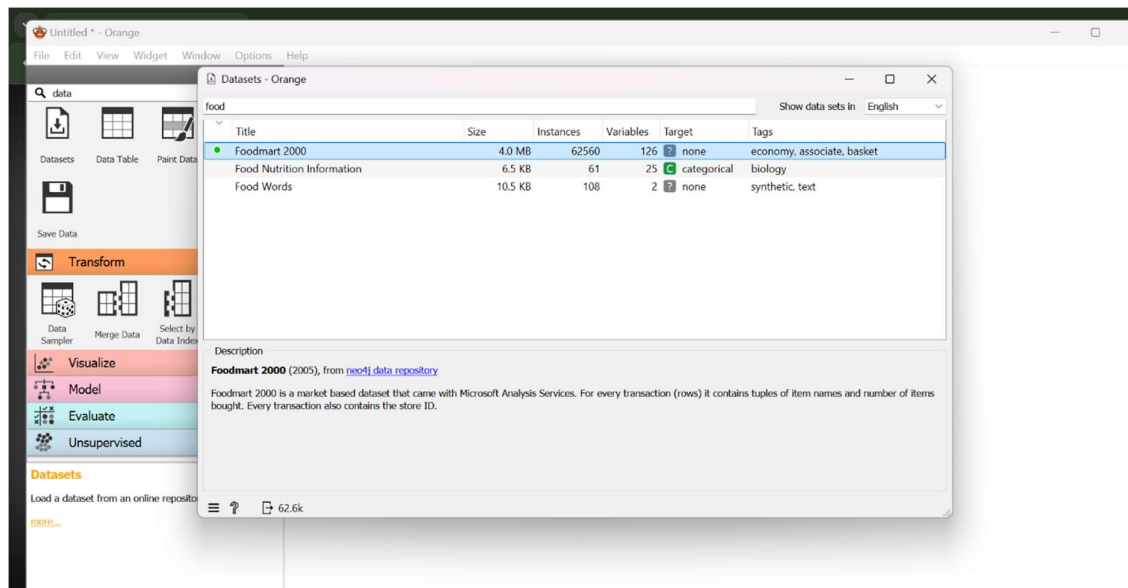


EXPERIMENT – 4



Orange Data Mining interface showing the Data Table widget. The widget displays 62560 instances (no missing data) with 126 features (sparse, density 100.00 %) and no target variables. The widget is configured to show variable labels (if present), visualize numeric values, color by instance classes, and select full rows. The data table shows 19 rows of data, including columns like Soup, STORE_ID_2=1, Fresh Vegetables=3, Milk=3, Plastic Utensils=2, etc.

Info: 62560 instances (no missing data), 126 features (sparse, density 100.00 %), No target variables, No meta attributes.

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

Selection: ☒ Select full rows.

Buttons: Restore Original Order, Send Automatically.

Footer: 62.6k | 62.6k | 62.6k

Orange Data Mining interface showing the Association Rules widget. The widget displays 99 rules (shown 99) with various metrics (Supp, Conf, Covr, Strg, Lift, Lev) and antecedent/consequent pairs. The widget is configured to find association rules, restrict search by below filters, and filter by antecedent/consequent. The data table shows 99 rules, including columns like Supp, Conf, Covr, Strg, Lift, Lev, Antecedent, and Consequent.

Info: Rules: 99 (shown 99).

Find association rules: ☐ Min. supp.: 1 %, Min. conf.: 12 %, Max. rules: 10k.

☐ Induce only classification rules.

☒ Restrict search by below filters.

Filter by Antecedent: Contains: Items, min: 1, max: 999.

Filter by Consequent: Contains: Items, min: 1, max: 999.

Buttons: Find Rules, Send selection.

Footer: 62.6k | 99

Supp	Conf	Covr	Strg	Lift	Lev	Antecedent	Consequent
0.050	0.287	0.175	1.619	1.017	0.001	Fresh Fruit	Fresh Vegetables
0.050	0.178	0.283	0.618	1.017	0.001	Fresh Vegetables	Fresh Fruit
0.035	0.123	0.283	0.421	1.035	0.001	Fresh Vegetables	Soup
0.035	0.293	0.119	2.375	1.035	0.001	Soup	Fresh Vegetables
0.020	0.171	0.119	1.467	0.982	-0.000	Soup	Fresh Fruit
0.015	0.129	0.118	1.013	1.082	0.001	Cheese	Soup
0.015	0.127	0.119	0.988	1.082	0.001	Soup	Cheese
0.031	0.262	0.118	2.405	0.926	-0.002	Cheese	Fresh Vegetables
0.021	0.175	0.118	1.486	1.000	-0.000	Cheese	Fresh Fruit
0.035	0.124	0.283	0.413	1.059	0.002	Fresh Vegetables	Dried Fruit
0.035	0.299	0.117	2.421	1.059	0.002	Dried Fruit	Fresh Vegetables
0.018	0.156	0.117	1.496	0.895	-0.002	Dried Fruit	Fresh Fruit
0.015	0.128	0.118	0.993	1.095	0.001	Cheese	Dried Fruit
0.015	0.129	0.117	1.007	1.095	0.001	Dried Fruit	Cheese
0.013	0.124	0.105	1.112	1.058	0.001	Cookies	Dried Fruit
0.027	0.260	0.105	2.691	0.921	-0.002	Cookies	Fresh Vegetables
0.018	0.175	0.105	1.663	1.005	0.000	Cookies	Fresh Fruit
0.028	0.279	0.099	2.854	0.987	-0.000	STORE_ID_13	Fresh Vegetables
0.017	0.172	0.099	1.763	0.982	-0.000	STORE_ID_13	Fresh Fruit
0.011	0.122	0.089	1.331	1.027	0.000	STORE_ID_17	Soup

Untitled * - Orange

File Edit View Widget Window Options Help

Filter...

Data
Transform
Visualize
Model
Evaluate
Unsupervised
Associate

Info
99 instances (no missing data)
6 features
No target variable.
2 meta attributes

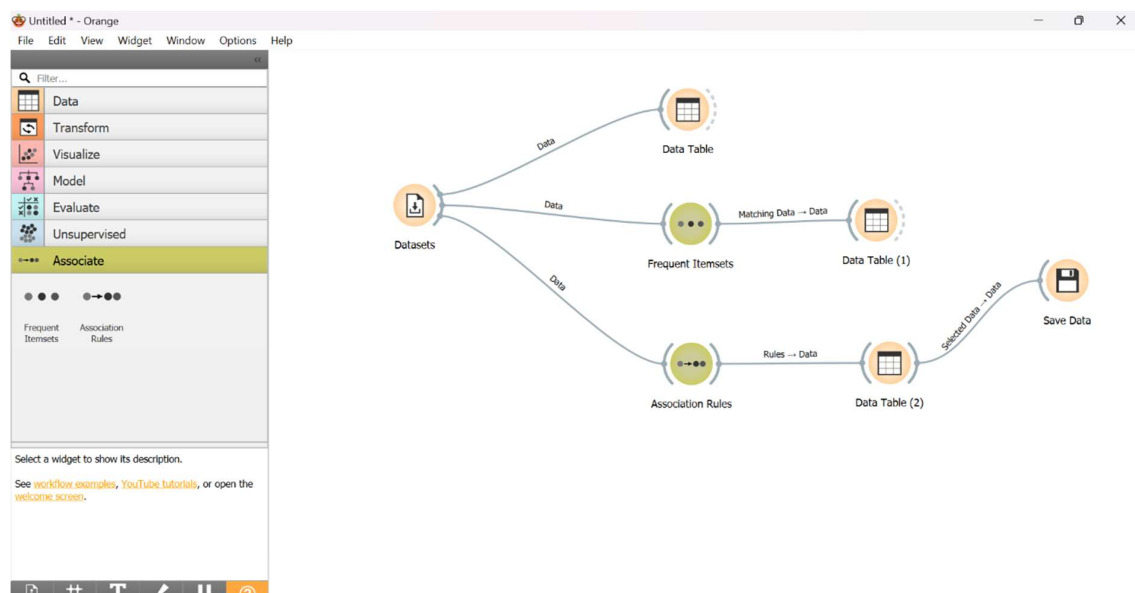
Variables
☒ Show variable labels (if present)
☐ Visualize numeric values
☒ Color by instance classes

Selection
☒ Select full rows

Restore Original Order
Send Automatically

99 | 99

	Antecedent	Consequent	Support	Confidence	Coverage
1	Fresh Fruit	Fresh Vegetables	0.05	0.287	0.175
2	Fresh Vegetables	Fresh Fruit	0.05	0.178	0.283
3	Fresh Vegetables	Soup	0.035	0.123	0.283
4	Soup	Fresh Vegetables	0.035	0.293	0.119
5	Soup	Fresh Fruit	0.02	0.171	0.119
6	Cheese	Soup	0.015	0.129	0.118
7	Soup	Cheese	0.015	0.127	0.119
8	Cheese	Fresh Vegetables	0.031	0.262	0.118
9	Cheese	Fresh Fruit	0.021	0.175	0.118
10	Fresh Vegetables	Dried Fruit	0.035	0.124	0.283
11	Dried Fruit	Fresh Vegetables	0.035	0.299	0.117
12	Dried Fruit	Fresh Fruit	0.018	0.156	0.117
13	Cheese	Dried Fruit	0.015	0.128	0.118
14	Dried Fruit	Cheese	0.015	0.129	0.117
15	Cookies	Dried Fruit	0.013	0.124	0.105
16	Cookies	Fresh Vegetables	0.027	0.26	0.105
17	Cookies	Fresh Fruit	0.018	0.175	0.105
18	STORE_ID_13	Fresh Vegetables	0.028	0.279	0.099
19	STORE_ID_13	Fresh Fruit	0.017	0.172	0.099



EXPERIMENT – 5

The screenshot shows the Orange data mining software interface. The 'Frequent Itemsets' widget is configured with the following settings:

- Number of Itemsets: 41
- Selected Itemsets: 0
- Selected examples: 0
- Expand all (button)
- Collapse all (button)
- Find Itemsets (button)
- Minimal support: 5%
- Max. number of Itemsets: 10000
- Filter Itemsets (button)
- Contains: (text input)
- Min. items: 1 | Max. items: 999
- Apply these filters in search (checkbox, checked)
- Send Selection Automatically (checkbox, checked)

The results table shows the following itemsets:

Itemsets	Support	%
Fresh Vegetables	17684	28.27
Fresh Fruit	3141	5.021
Fresh Fruit	10926	17.46
Soup	7447	11.9
Cheese	7354	11.76
Dried Fruit	7304	11.68
Cookies	6571	10.5
STORE_ID_13	6197	9.906
STORE_ID_17	5596	8.945
Wine	5019	8.023
Paper Wipes	4944	7.903
Canned Vegetables	4879	7.799
Frozen Vegetables	4276	6.835
Chocolate Candy	4189	6.696
Nuts	4188	6.694
Milk	4134	6.608
STORE_ID_15	4099	6.552
Preserves	4098	6.551
STORE_ID_11	4074	6.512
Chips	4050	6.474
Eggs	3991	6.379
STORE_ID_7	3956	6.324
STORE_ID_16	3923	6.271

