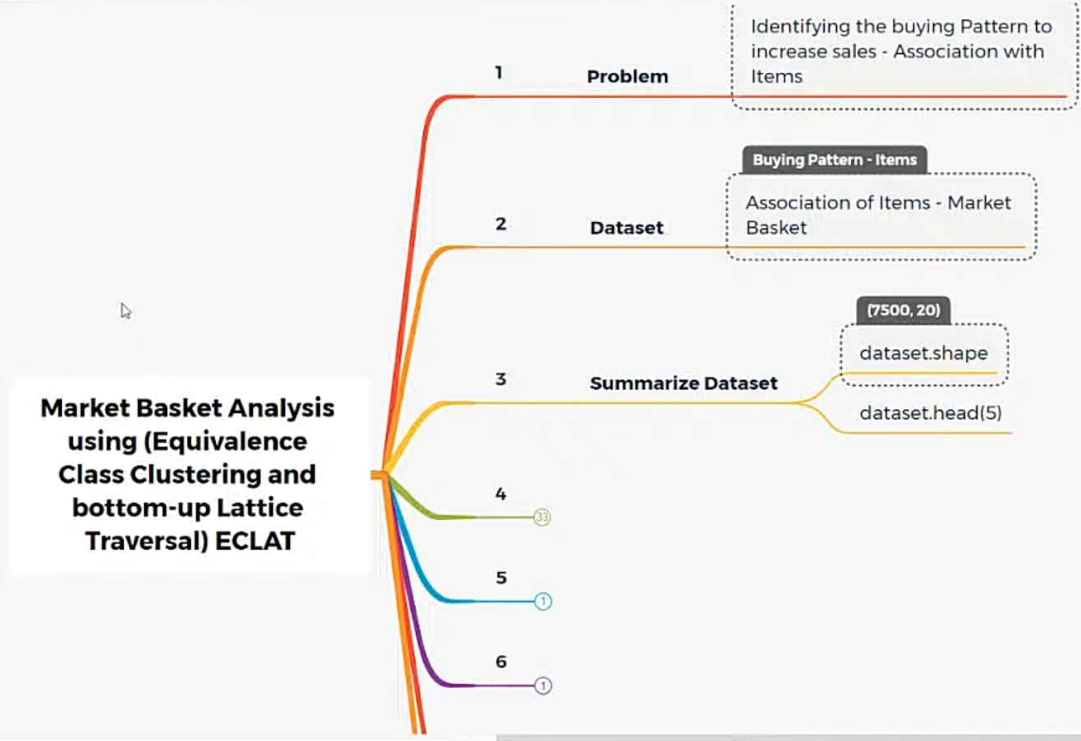


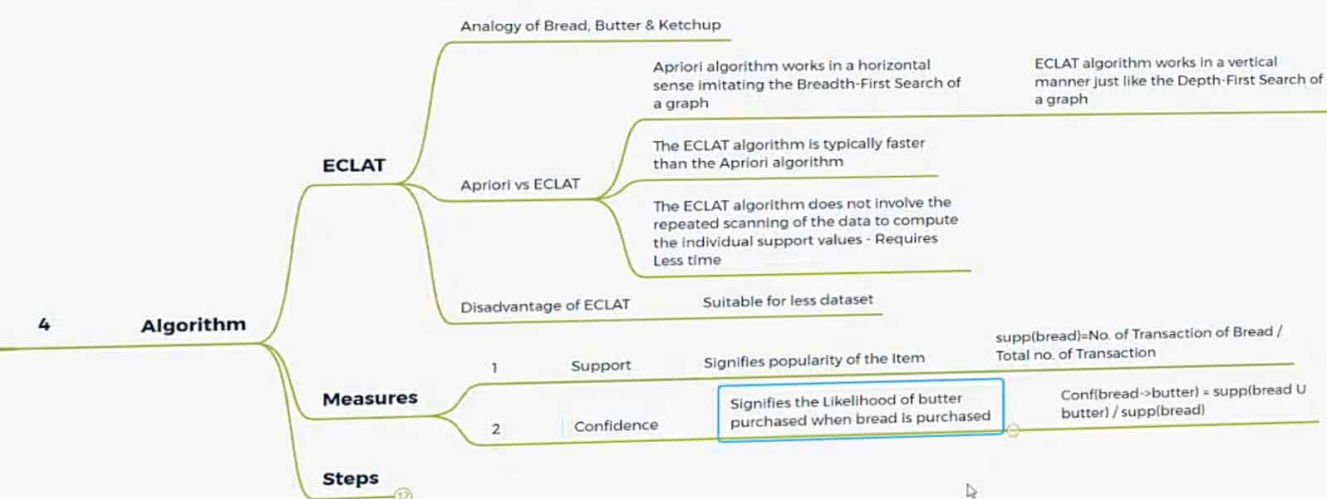
Microsoft Excel interface showing a spreadsheet with food items listed in columns A through W. The ribbon includes tabs for Home, Insert, and Formulas. The spreadsheet data is as follows:

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W
1	shrimp	almonds	avocado	vegetables	green grapes	whole wheat	yams	cottage cheese	energy drink	tomato juice	low fat yogurt	green tea	honey	salad	mineral water	salmon	antioxidant	frozen smoothie	spinach	olive oil			
2	burgers	meatballs	eggs																				
3	chutney																						
4	turkey	avocado																					
5	mineral water	milk	energy bar	whole wheat	green tea																		
6	low fat yogurt																						
7	whole wheat	french fries																					
8	soup	light cream	shallot																				
9	frozen veg	spaghetti	green tea																				
10	french fries																						
11	eggs	pet food																					
12	cookies																						
13	turkey	burgers	mineral water	eggs	cooking oil																		
14	spaghetti	champagne	cookies																				
15	mineral water	salmon																					
16	mineral water																						
17	shrimp	chocolate	chicken	honey	oil	cooking oil	low fat yogurt																
18	turkey	eggs																					
19	turkey	fresh tuna	tomatoes	spaghetti	mineral water	black tea	salmon	eggs	chicken	extra dark chocolate													
20	meatballs	milk	honey	french fries	protein bar																		
21	red wine	shrimp	pasta	pepper	eggs	chocolate	shampoo																
22	rice	sparkling water																					
23	spaghetti	mineral water	ham	body spray	pancakes	green tea																	
24	burgers	grated cheese	shrimp	pasta	avocado	honey	white wine	toothpaste															
25	eggs																						
26	parmesan	spaghetti	soup	avocado	milk	fresh bread																	
27	ground beef	spaghetti	mineral water	milk	energy bar	black tea	salmon	frozen smoothie	escalope														
28	sparkling water																						
29	mineral water	eggs	chicken	chocolate	french fries																		
30	frozen veg	spaghetti	vams	mineral water																			

dataset1







FileEditInsertToolsViewHelpMarket Basket Analysis using EC... — Edited

Mind MapOutliner

TopicSubtopicRelationshipSummaryBoundaryInsertZENPitchPanel

2ConfidenceSignifies the Likelihood of butter purchased when bread is purchased

1Database In Vertical FormatItemset vs List of Items

2Itemset generated by Intersection of 1 ItemsetItemset bs List of Items

3Itemset generated by Intersection of 2 Itemset

4Itemset generated by Intersection of 3 Itemset

5Taking the Itemset which is having high value than the threshold confidence level

Conf(bread->butter) = supp(butter) / supp(bread)

universal) ECLAT

5Data Preprocessing

6Training Dataset with ECLAT

7Consider only Support and Confidence

8Result in Dataframe format

38 Days Evaluated

```
!pip install pyECLAT
import pandas as pd
```

```
... Requirement already satisfied: pyECLAT in /usr/local/lib/python3.7/dist-packages (1.0.2)
Requirement already satisfied: pandas>=0.25.3 in /usr/local/lib/python3.7/dist-packages (from pyECLAT)
Requirement already satisfied: numpy>=1.17.4 in /usr/local/lib/python3.7/dist-packages (from pyECLAT)
Requirement already satisfied: tqdm>=4.41.1 in /usr/local/lib/python3.7/dist-packages (from pyECLAT)
Requirement already satisfied: python-dateutil>=2.7.3 in /usr/local/lib/python3.7/dist-packages (from pandas)
Requirement already satisfied: pytz>=2017.2 in /usr/local/lib/python3.7/dist-packages (from pandas)
Requirement already satisfied: six>=1.5 in /usr/local/lib/python3.7/dist-packages (from python-dateutil)
```

Load Dataset from Local Directory



```
from google.colab import files
uploaded = files.upload()
```

Choose Files dataset1.csv

- dataset1.csv(application/vnd.ms-excel) - 302908 bytes, last modified: 4/8/2020 - 100% done

Saving dataset1.csv to dataset1 (1).csv

## Importing the dataset

```
[9] dataset = pd.read_csv('dataset1.csv', header=None)
print(dataset.shape)
print(dataset.head(5))
```

Executing (11s) Cell > upload() > eval\_js() > read\_reply\_from\_input()





## Copy of 24\_MarketBasketAnalysisusingECLAT.ipynb

File Edit View Insert Runtime Tools Help [All changes saved](#)

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+ Code + Text

✓ RAM  
Disk

Editing



### Training APRIORI

```
from pyECLAT import ECLAT
eclat_instance = ECLAT(data=dataset, verbose=True) #verbose=True to see the loading bar
```

```
100% |██████████| 120/120 [00:01<00:00, 74.72it/s]
100% |██████████| 120/120 [00:00<00:00, 2407.31it/s]
100% |██████████| 120/120 [00:00<00:00, 2985.55it/s]
```

### Results

✓ 0s completed at 19:14







colab.research.google.com/drive/14PNvZ\_wLk9PvgBPAAo5JBLVKnDTdjON#scrollTo=wOuthXLITOGI

# Copy of 24\_MarketBasketAnalysisusingECLAT.ipynb

File Edit View Insert Runtime Tools Help [All changes saved](#)

+ Code + Text

RAM  Disk  Editing

## Training APRIORI

```
from pyECLAT import ECLAT
eclat_instance = ECLAT(data=dataset, verbose=None) #verbose=True to see the loading bar
```

## Results

```
[49] result = eclat_instance.support(min_support=None)
result
```

```
{' asparagus': 0.0001333155579256099,
```

1s completed at 19:16

Type here to search

25°C Partly cloudy

