

## **Acceptable data format**

id	date	item
ID_1	01/01/1920	dermatitis eczema
ID_10	01/01/1925	psoriasis
ID_2	01/01/1920	osteoarthritis excl spine
ID_3	01/01/1921	asthma
ID_4	16/11/1921	cerebral palsy
ID_5	01/01/1922	glaucoma
ID_6	21/07/1922	hypertension
ID_7	07/07/1923	asthma
ID_8	02/01/1924	asthma
ID_9	01/01/1925	learning disability

id	date	item
100	01/01/1920	event1
101	02/01/1920	event2
102	03/01/1920	event3
103	04/01/1920	event4
104	05/01/1920	event5
105	06/01/1920	event6
106	07/01/1920	event2
107	08/01/1920	event3
108	09/01/1920	event4
109	10/01/1920	event5

# sample 1

#sample 2

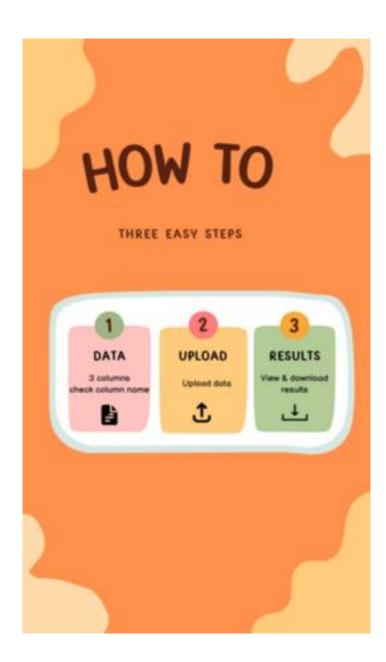


Sample data available in the documentation tab

## 3 columns

- 1. Id
- 2. date
- 3. item

Column names case sensitive
Maintain same names for your data

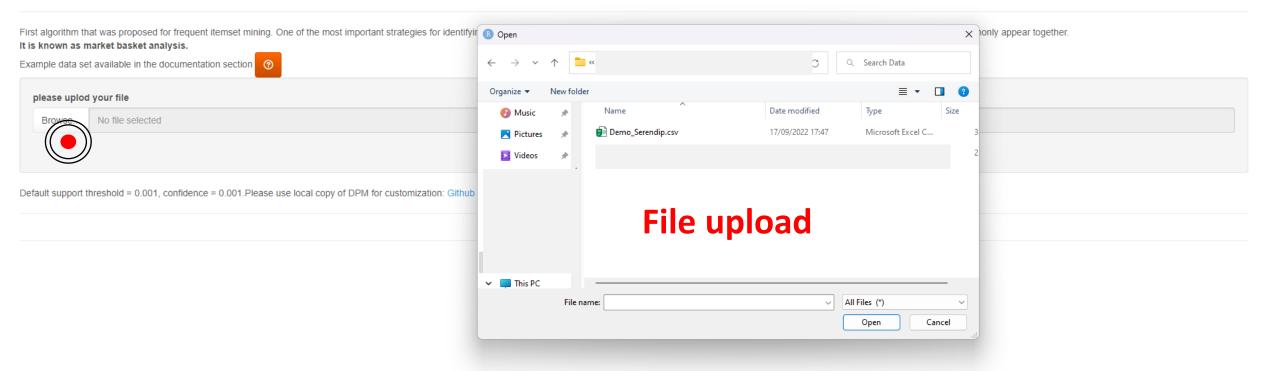


Spade

Serendip



#### Apriori



#### Apriori

First algorithm that was proposed for frequent itemset mining. One of the most important strategies for identifying associations between items is market basket analysis. It operates by searching the data for groups of entries that commonly appear together. It is known as market basket analysis.

Example data set available in the documentation section 

②

please uplod your file

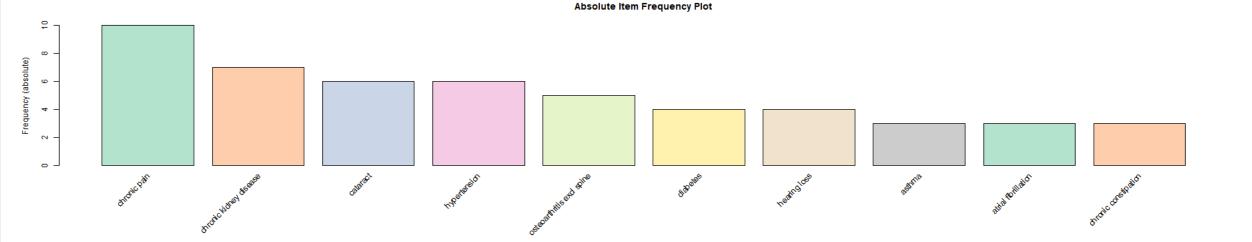
Demo\_Serendip.csv

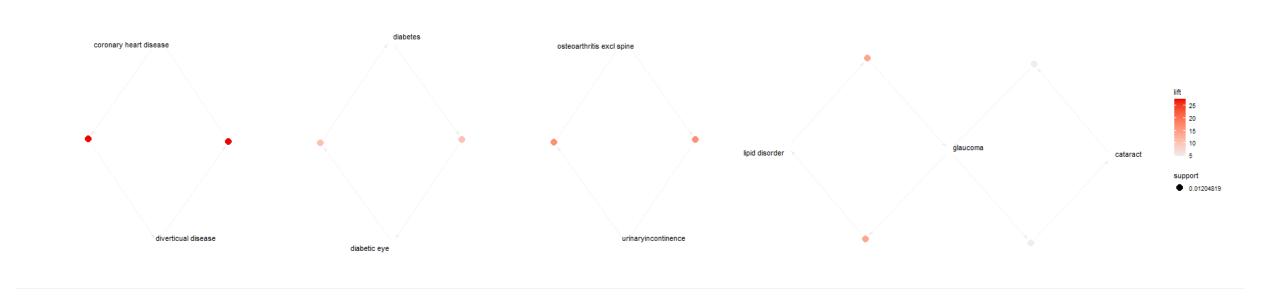
Upload complete

Default support threshold = 0.001, confidence = 0.001.Please use local copy of DPM for customization: Github

▲ Download mined patterns

## **View & download results**





11030	NOOR NOOR NOOR NOOR NOOR NOOR NOOR NOOR						
	Ihs	rhs	\$ support \$	confidence ‡	coverage ‡	lift ‡	count ‡
	All	All	All	All	All	All	All
1	{coronary heart disease}	{diverticual disease}	0.0120481927710843	1	0.0120481927710843	27.6666666666667	1
2	{diverticual disease}	{coronary heart disease}	0.0120481927710843	0.333333333333333	0.036144578313253	27.6666666666667	1
3	{urinaryincontinence}	{osteoarthritis excl spine}	0.0120481927710843	1	0.0120481927710843	16.6	1
4	{osteoarthritis excl spine}	{urinaryincontinence}	0.0120481927710843	0.2	0.0602409638554217	16.6	1
5	{lipid disorder}	{glaucoma}	0.0120481927710843	0.5	0.0240963855421687	13.83333333333333	1
6	{glaucoma}	{lipid disorder}	0.0120481927710843	0.333333333333333	0.036144578313253	13.8333333333333	1
7	{diabetic eye}	{diabetes}	0.0120481927710843	0.5	0.0240963855421687	10.375	1
8	{diabetes}	{diabetic eye}	0.0120481927710843	0.25	0.0481927710843374	10.375	1
9	{glaucoma}	{cataract}	0.0120481927710843	0.333333333333333	0.036144578313253	4.6111111111111	1
10	{cataract}	{glaucoma}	0.0120481927710843	0.166666666666667	0.072289156626506	4.6111111111111	Show desk

Result

DPM: Disease Pattern Miner(http://diseasepatterns.com/)

# cSpade

Sample data available in the documentation tab

## 3 columns

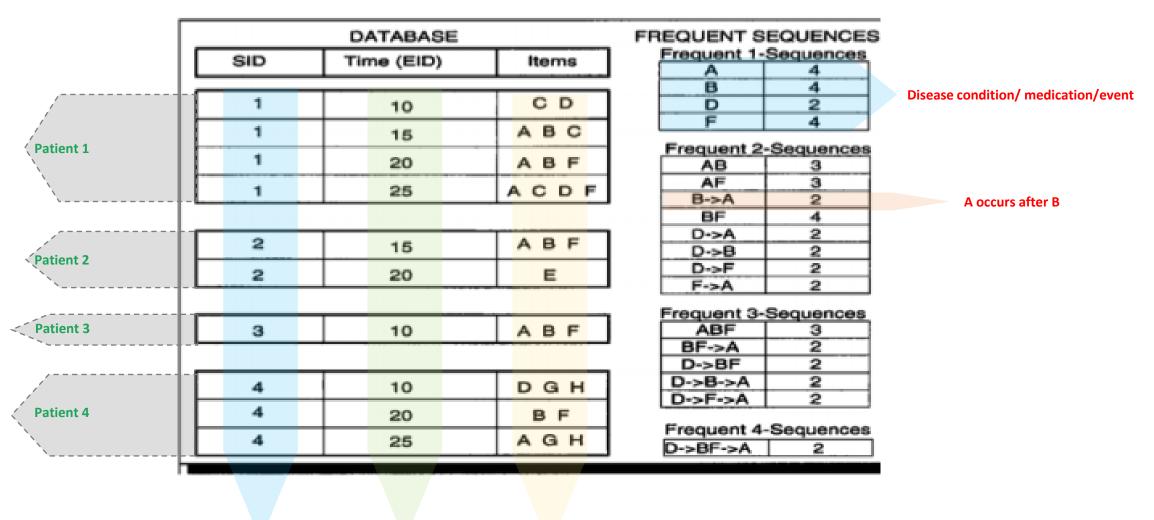
- 1. Id
- 2. date
- 3. item

Column names case sensitive
Maintain same names for your data

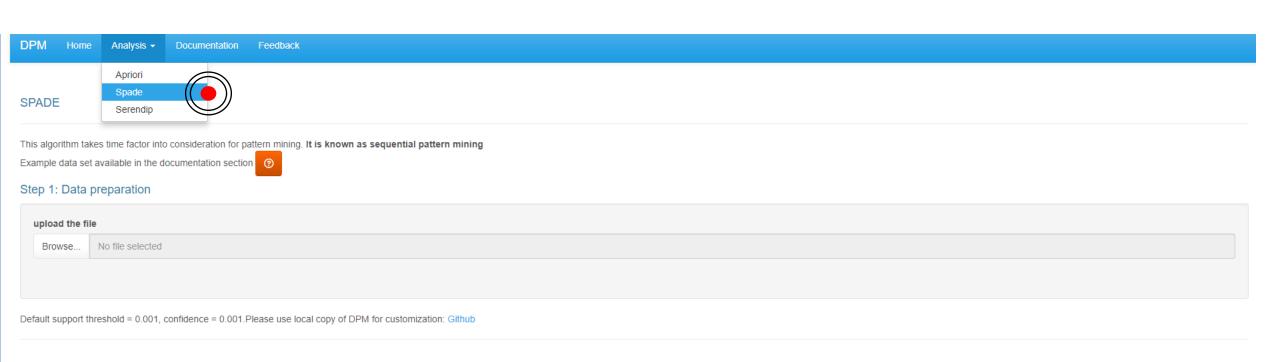


- 1. Upload your data to convert to transaction format
- 2. Download the transaction format
- 3. Upload the transaction data

### **Sequential pattern mining**

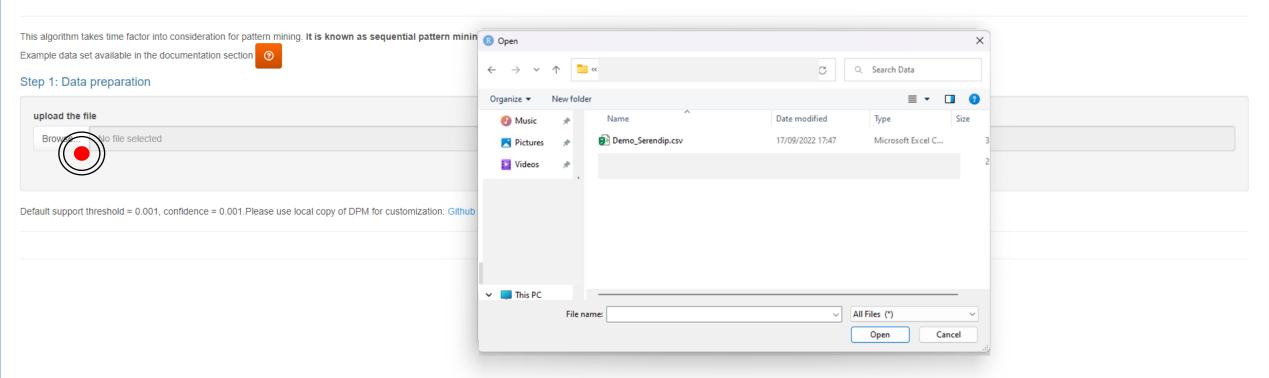


Patient ID Event ID/ time Event occurred



## Phase: 1

#### **SPADE**



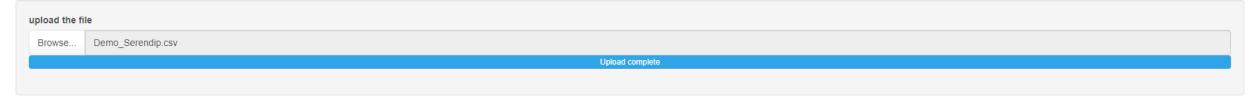
Phase: 1

#### SPADE

This algorithm takes time factor into consideration for pattern mining. It is known as sequential pattern mining

Example data set available in the documentation section

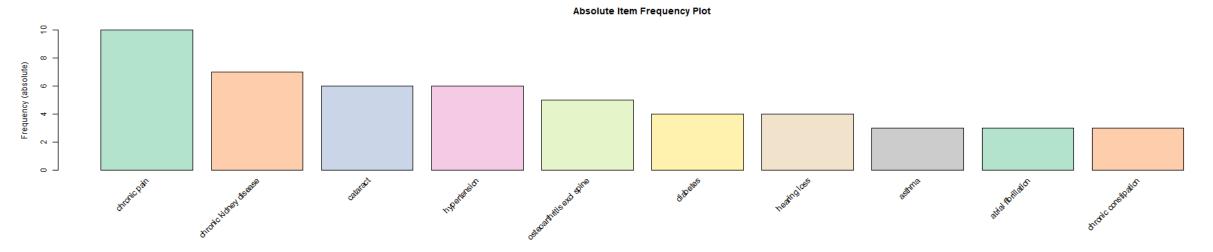
#### Step 1: Data preparation

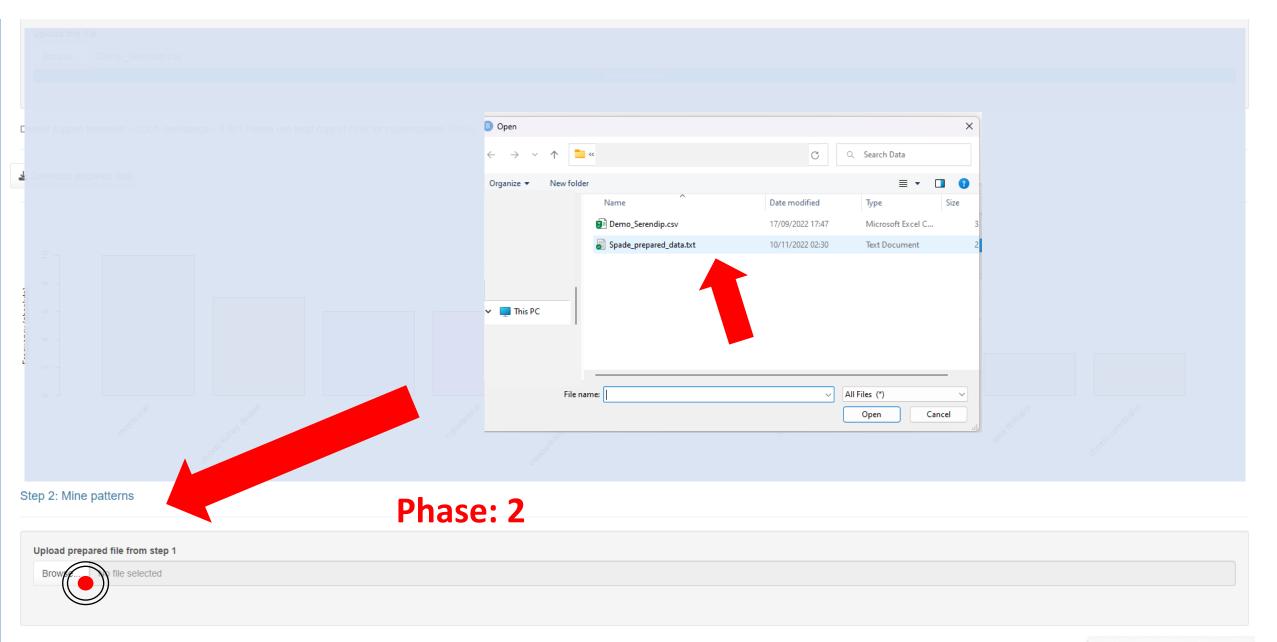


Default support threshold = 0.001, confidence = 0.001. Please use local copy of DPM for customization: Github



## **Download prepared data for phase 2**





#### Step 2: Mine patterns

Result



## Phase: 2

	rule	support ‡	confidence ‡	lift ÷
	All	All	All	All
3	<{glaucoma}> => <{urinaryincontinence,osteoarthritis excl spine}>	0.1	1	10
4	<{glaucoma},{chronic pain}> => <{urinaryincontinence,osteoarthritis excl spine}>	0.1	1	10
5	<{glaucoma},{cataract}> => <{urinaryincontinence,osteoarthritis excl spine}>	0.1	1	10
6	<{chronic pain},{cataract}> => <{urinaryincontinence,osteoarthritis excl spine}>	0.1	0.5	5
7	<{glaucoma},{chronic pain},{cataract}> => <{urinaryincontinence,osteoarthritis excl spine}>	0.1	1	10
12	<{psoriasis}> => <{urinary incontinence}>	0.1	0.5	5
13	<{renalstones}> => <{urinary incontinence}>	0.1	1	10
14	<{psoriasis},{renalstones}> => <{urinary incontinence}>	0.1	1	10
15	<{hypertension},{renalstones}> => <{urinary incontinence}>	0.1	1	10
16	<{renalstones},{hearing loss}> => <{urinary incontinence}>	0.1	1	10
Showing	1 to 10 of 11,982 entries	Previous 1	2 3 4 5 1,199 Show deskt	

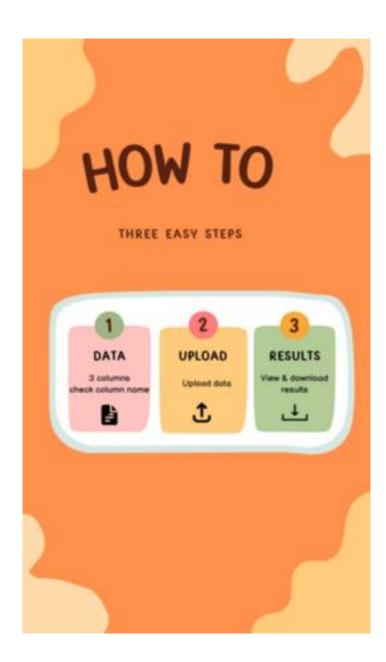
## SERENDIP

Sample data available in the documentation tab

## 3 columns

- 1. Id
- 2. date
- 3. item

Column names case sensitive
Maintain same names for your data



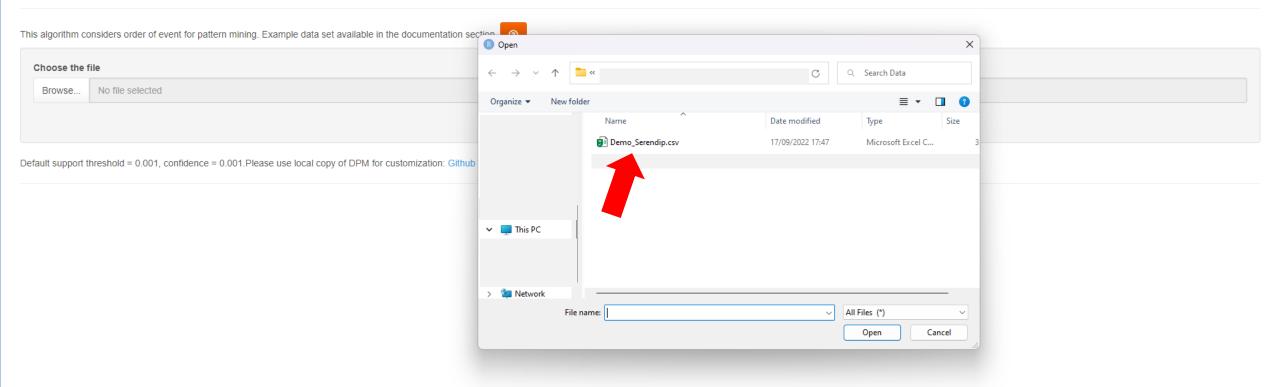


Default support threshold = 0.001, confidence = 0.001.Please use local copy of DPM for customization: Github

#### Download

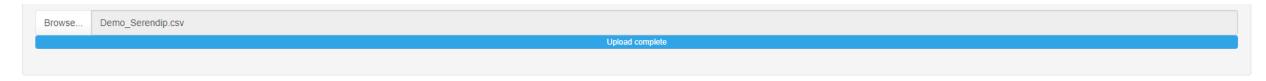
#### Results

#### SERENDIP

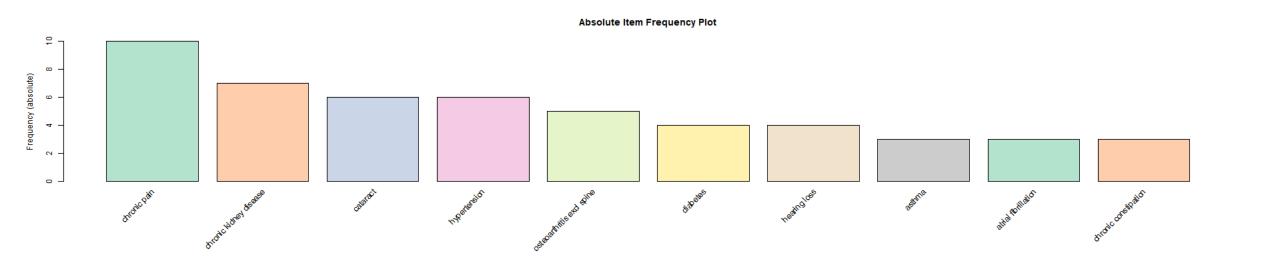


#### Download

#### Results



Default support threshold = 0.001, confidence = 0.001. Please use local copy of DPM for customization: Github



#### Download



## **View & download results**

Patterns

	Rule	A V	Count Support	Confidence	‡ Lift	Patterns_of
	All	All	All	All	All	All
1	asthma=>allergic and chronicrhinitis		1 0.1000	0.3333	3.3333	Two
2	asthma=>gastritis and duodenitis		1 0.1000	0.3333	3.3333	Two

DPM: Disease Pattern Miner(http://diseasepatterns.com/)