**Association Rules**

**Association Rules:**

Also called as *Market Basket Analysis or Affinity Analysis or Relationship mining*.

**Objective:**

To find best rules

*How can Association Rules be used ?*

1. Promotion on one item, raise price of related item

2. Placement in Store

3. Stocking

4. Product bundling

*Rule Form*

Antecedent ---> Consequent [support, confidence ] And lift

**Apriori Algorithm for Association Rules:**

For K products,

1. Set min support criteria

2. Generalize list of 1-item sets that meet support criteria

3. Use list of 1-item sets to generate list of 2-item sets that meet support criteria

4. Use list of 2-item sets to generate list of 3-item sets that meet support criteria continue up to K-item sets

**How to clean these rules?**

We also get duplicate or repeated rules, such rules can be cleaned

We check for lift ratio, if having more lift ratio we keep that and discard other one

**Data Used:**

Groceries, Book, My\_movies

**Programming:**

Python

The Codes regarding this Association Rules with its datasets *Groceries, Book, My\_movies* are present in this Repository in detail