**Association analysis:**

Consider the two screenshots in the question

**Rule**: {coke} -> {Heineken, sardines}

To check whether the given rule is true or not, the above rule should satisfy the given three conditions (support, confidence, and lift)

**Support:** support tells us how many times that rule exists in the database (symmetric)

Support = total number of rows where Heineken, coke, and sardines exist/ total no of rows = 12%

**Confidence:** it shows how many times the rule is correct (asymmetric)

Confidence = support of Heineken, coke, and sardines/ support of coke = 41%

**Lift**: it’s the ratio of support if antecedents and consequents were independent

Lift = support of Heineken, coke, and sardines/support for Heineken and sardines\* support for coke = 2.23

By taking this rule

* We can’t decrease coke price and increase Heineken and sardines (technically not possible
* We can’t give (buy coke and get Heineken and sardines for free or for 50%), because the coke price is less compared to Heineken and sardines
* The best thing we can do is to place Heineken and sardines in the next freezer to coke so that customers can notice those things and there is a high chance of buying those things.