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## Subject-based algorithm for association rules classification

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One of the techniques in the field of data mining is association rules. As an initial definition of these techniques, we must say: Often there is a close correlation between a given set of data, so the association rules that we sometimes called them the dependence rules or the community rules are made and applied for generating new patterns among the data. In finding the community rules generally we do not follow any particular purpose and we just look in finding all the relationships and dependencies, while the category purpose is clearly defined. This paper investigates the sorting methods in this field with emphasis on the classification based on subject methods (expert's interference), statistical and mathematical methods and also phasic methods. The items of the community rules that are very similar to each other and they also are numerous usually need the expert's idea for classification. Subject matter algorithms are one of the algorithms kinds which are present for classification and grouping. The algorithm presented here is a method for association rules classification with the expert's idea. The tested data shown here are those in the medical field and the algorithm and the algorithm here with using Apriori algorithm produces the rules for the data and as before the expert idea is used here as a data value parameter so the rules are valuable, the early Zadeh rule is used here. In the next section, 5 classes are considered as number of groups or classes that are determined according to their values and the expert's idea. After that the rules with different values assign to these groups. The next step is the user's interaction with the system; the desired signs are matched with the rules at the science site and cause to find the desired rules from those classes. One step of the algorithm is an update rule parameter that evaluates the errors of the system; and after some repetitions and algorithm run, it detects the right class rules. The utility issued for the evaluation of the algorithm factors, these factors change according to the time and the number of repetition. It means that the less time of the use of the rules, the more use of the algorithm evaluation; so called the utility of the rule is increased and this led to an increase in the speed of the algorithm. It should be noted that this algorithm does not follow any particular hypothesis and it is a general methodology.

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