

The knowledge discovery in databases process consists of processing a huge volume of data in order to extract knowledge units that can be reused either by an expert in the domain or by a knowledge-based system to solve problems in the domain. Moreover, the KDD process is iterative and interactive, and is controlled by an analyst, who is in charge of guiding and validating the extraction process. In this chapter, we focused primarily on symbolic methods, and especially on lattice-based classification, level-wise search for frequent itemsets, and association rule extraction. Data mining methods are divided into two main categories: symbolic and numerical. The KDD process is based on three major steps: data preparation, data mining, and interpretation of the extracted units. These methods are operational and can provide good results in real-world problems.