

27.05.2015

Answer to the following questions. You may give your answers in English or Finnish (Swedish).

Vastaa seuraaviin neljään kysymykseen. Voit vastata englanniksi tai suomeksi (ruotsiksi).

1. What is data mining? What is knowledge discovery? Explain the process of data mining and how various spatial methods can be used during the different steps in the process.
2. Calculate support and confidence of the rule $\{A,C\} \Rightarrow \{D\}$ from the given data set. Use the given data set to demonstrate how Apriori algorithm works, confidence requirement value $\sigma=2$.

Transaction	Items
1	A C D
2	B C E
3	A B C E
4	B E

3. Which methods you can use for solving classification problem? How do you extend non-spatial classification methods into spatial classification methods? Why this spatial extension is required?
4. Explain partition and density based clustering methods? Give an example of partition and density based clustering methods.