

Exercise sheet Nr. 2

Knowledge Discovery in Wide Area Networks

GROUPWORK:

(G 1)Line diagram

- Define: What is a lattice?
- Find a preferably small lattice and draw its line diagram.
- Which of the following line diagrams (see Figure 1) does not represent a lattice? Why?

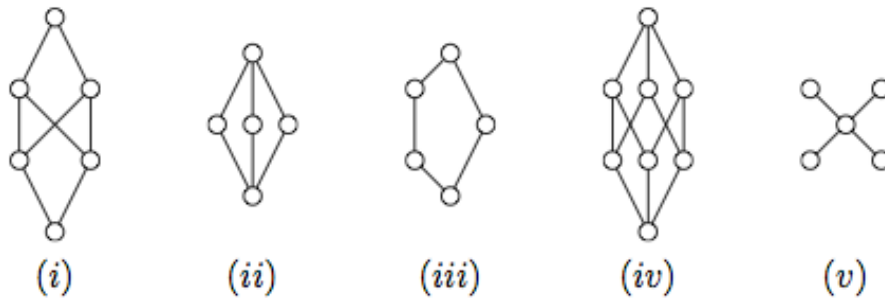


Figure 1: Order diagrams

(G 2)Complete lattice

- Define: What is a complete lattice?
- Can you find a complete lattice among the lattices of Exercise 1c?
- Can you give an example of a lattice which is not a complete lattice?

(G 3)Formal Concepts

Try to compute all formal concepts of the formal context shown in Figure 2

	generation			sex		financial status		
	older	middle	younger	male	female	rich	carefree	indebted
Tick			×	×			×	
Trick			×	×			×	
Track			×	×			×	
Donald		×		×				×
Daisy		×			×		×	
Gustav		×		×			×	
Dagobert	×			×		×		
Annette	×				×		×	
Primus v. Quack	×			×			×	

Figure 2: Grobian Gans: Die Ducks. Psychogramm einer Sippe. Rowohlt, Reinbek bei Hamburg 1972, ISBN 3-499-11481-X