A partial ordering data type is based on a partial ordering relation P:
for any a,b,c ∈ A,
1. P(a,a)=1,
2. P(a,b)&P(b,c) ⇒ P(a,c).
This relation is also called a quasi-ordering relation. There is no numeric coding (representation) for elements of A completely consistent with relation P, i.e., there is not a numeric relation equivalent to P. The formal concepts of consistency and equivalency will be discussed in the next section.