Closure operations as models of databases

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Consider the relational model of databases. It is basically a matrix where the columns are the kinds of data (attributes), the rows are the data of one individual or object. We say that a set B of columns (attributes) functionally depends on the set A of columns if there are no two different rows equal in A and different in B. In notation $A \rightarrow B$. It is easy to see that $c(A) = \{b : A \rightarrow \{b\}\}$ is a closure operation on the set of attributes. Conversely the closure operation determines the structure of functional dependencies. Therefore if we only consider the dependency structure of the database and disregard its actual content and other dependencies then this closure is a good model for the database. We will give a survey of problems and results on closure operations motivated by databases in this way.