

Information retrieval (IR) has one of the principal place in database management systems. Search tools are often used in modern systems, ex. Boolean retrieval, with is used in database systems for binary indexing, with then makes search easy. This algorithm is used often, because it can work with big data, also it's used in such structured information, where choice is small. Let's review an example: we have table persons, where one column is sex and unique identifier is ID column (or private number as a second choice).

ID:	1	2	3	4	5	6	7	8	9
Sex:									
female	0	1	1	0	0	0	1	1	1
male	1	0	0	1	1	1	0	0	0

Search female persons in this table. We must take all the IDs, which has 1 in female row: 2,3,7,8,9. These IDs identify rows female persons in table Persons. Algorithm is used for search in structured information, but for semantical search it's result isn't the best. If table has text in it's column, semantical search in this column won't have result. Boolean retrieval looks at text as a structure. ex. for some documents:

1. At first these documents must have headings, or be headed by us.
2. Create table, where column names are document titles, and different words used in these documents are rows.

	doc 1	doc 2	doc 3	doc 4	doc 5
word 1	1	0	0	0	0
word 2	1	1	1	0	0
word 3	0	1	0	1	1
word 4	0	1	0	0	0
...					

This table is created as the example above. If we want to search documents, where are used word 1 and word 2 together, we need to take columns, where we have 1, so, doc 1 is such a document. 10000 and 11100 = 10000

Such structure we can create in database. Boolean retrieval algorithm doesn't give a chance to search in semantical point of view. For this algorithm to be used perfectly, more accent must be made on how to presentate text data as a semantically structured information.