

Definition of Truncation and Boolean Operator

Truncation:

Truncation is the addition of a symbol at the beginning or end of a word stem in a keyword search to retrieve variants containing the root. Truncation is particularly useful in retrieving both the *singular* and the *plural* forms of a word in the same search.

Example: *librar* to retrieve records containing "interlibrary," "inralibrary," "librarian," "librariana," "librarianship," "libraries," etc.

In most online catalogs and bibliographic databases, the end truncation symbol is the * (asterisk), but since the truncation symbol is not standardized, other symbols may be used (?, \$, #, +). In some databases, the user may add a number after the symbol to specify how many characters the symbol may represent (*example:* facet?1 to retrieve "facets" but not "faceted" or "facetiae"). As a general rule, it is unwise to truncate fewer than four characters (*example:* art* retrieves "artist," "artistic," "artistry," and "artwork," but also "artichoke," "artillery," etc.). Some databases are designed to truncate automatically. Users are advised to read carefully any help screens before truncating in an unfamiliar database. Synonymous with *character masking*. *See also:* wildcard. (1)

Boolean Operators:

A system of logic developed by the English mathematician George Boole (1815-1864) which allows the user to combine words or phrases representing significant concepts in a keyword search of an online catalog or bibliographic database. Three logical commands (sometimes called "operators") are available in most search software:

The **OR** command is used to *expand* retrieval by including synonyms and related terms in the query. *See also:* logical sum.

Search statement: violence or conflict or aggression

The **AND** command is used to *narrow* search results. Each time another concept is added using "and" the search becomes more specific. In some online catalogs and databases, the "and" command is *implicit* (no need to type it in a keyword search). In other interfaces, terms will be searched as a phrase if not separated by "and." *See also:* logical product.

Search statement: violence and television and children

The **NOT** command is used to *exclude* unwanted records from search results. *See also:* logical difference.

Search statement: television not cartoon*

When two *different* Boolean commands are used in the same search statement, parentheses must be included to indicate the sequence in which they are to be executed (syntax). This technique is called nesting.

Search statement: television and (violence or aggression) and children

For a detailed discussion of Boolean logic, please see the entry by Gwyneth Tseng in the *International Encyclopedia of Information and Library Science* (Routledge: 1997). *See also:* proximity, truncation, and Venn diagram. (1)

(1) Source: Reitz, Joan M. ODLIS : Online Dictionary of Library and Information Science.
(URL: <http://www.wcsu.edu/library/odlis.html>)