Advanced Searching Strategies for Databases - Boolean Operators

- Use this handout after reading the Handout, Introduction to Databases; it will provide additional information on searching databases to find more precise and relevant results.
- Boolean Operators allow the users of databases to combine words or phrases in a keyword search
- There are 3 logical commands: **AND, OR, NOT**

**AND**
- This command is used to narrow search results.
- Each time another concept or word is added using AND the search becomes narrower and more specific.
- In most databases, each word entered will be separated by AND if not entered in quotation marks.

*Search Statement: child* AND television AND violence
-This search statement will retrieve results containing the words; children, child, television, and violence.
-It will not get results containing only the term children or only the term television, or only the term violence.

**NOTE:** The asterisk, *, is an example of truncation and will retrieve variants on the root of the word, or different endings for that word. For a more thorough explanation, view the handout, “Introduction to Databases,” found in this packet.

**OR**
- This command is used to expand results by including synonyms and related terms in the search.
- Synonyms are important because databases are keyword specific; the more synonyms in the search, the more comprehensive the results.
- Combining terms with OR will increase the number of results, but decreases the precision of the search.
- At least one of the search terms will be present in each search result.

*Search Statement: kid OR youth OR child*
-This search statement will retrieve results containing at least one of the three terms; kid, youth, and all words beginning with child such as children.

**NOT**
- This command is used to exclude unwanted records from search results
- Combining terms with NOT decreases the number of results.

*Search Statement: child* NOT teenager
- All results of this search statement will contain only the word child–(ren). None of the results contain the word teenager.

**Use of Two Boolean Operators**
- 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.
- With the use of parentheses, the term of the phrase within the parentheses will be searched first.
- Without a parentheses, the database will retrieve results according to the order AND, OR, NOT.
- Sets of parentheses can be put inside one another, and the results will retrieve the inner-most parentheses first

*Search Statement: Television and violen* and (child* or youth)
-With this search statement, the results will contain child, children, and television and violence or violent, as well as youth and television and violence or violent
-Without the parentheses, it would retrieve results for television and violence and child, and results for just the term youth alone, without television and violence. The parentheses are essential to retrieve relevant results.

If you have any questions about formulating search strategies or advanced searching techniques, stop by the Information desk located in the Library, email us at: libraryhelp@newhaven.edu, or call us at (203)932-1789.