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Title: Boolean Searching

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import java.io.\*;

import java.util.\*;

class BooleanSearch

{

public static void main(String args[]) throws IOException

{

System.out.println("\n\nAllowed-AND/OR?ANDNOT");

System.out.println("\n Enter teh search string:");

String query=new String();

BufferedReader br=new BufferedReader(new InputStreamReader(System.in));

query=br.readLine();

StringTokenizer st=new StringTokenizer(query," ");

String[]keyword=new String[st.countTokens()];

String[]Operators=new String[10];

for(int j=0;j<st.countTokens();j++)

keyword[j]="";

int keywordcount=0,opcount=0;

while(st.hasMoreElements())

{

String temp=st.nextToken();

if(temp.equals("AND")||temp.equals("OR")||temp.equals("ANDNOT"))

{

Operators[opcount++]=temp;

keywordcount++;

}

else

{

temp=temp.toLowerCase();

if(keyword[keywordcount].length()==1)

keyword[keywordcount]=temp;

else

{

keyword[keywordcount]=keyword[keywordcount].concat("");

keyword[keywordcount]=keyword[keywordcount].concat(temp);

}

}

}

String[]Foundln=new String[3];

int foundcount=0;

for(int i=1;i<=3;i++)

{

boolean intermittent =false;

FileInputStream inStream= new FileInputStream("doc"+i+".txt");

int inBytes =inStream.available();

byte inBuf[]=new byte[inBytes];

int bytesRead= inStream.read(inBuf,0,inBytes);

String docs=new String(inBuf);

docs=docs.toLowerCase();

inStream.close();

if(opcount>0)

{

for(int j=0;j<opcount;j++)

{

if(Operators[j].equals("AND"))

{

if(j==0)

{

if((docs.indexOf(keyword[j])!=-1) && (docs.indexOf(keyword[j+1])!=-1))

intermittent=true;

else

intermittent=false;

continue;

}

else if(j<0)

{

if(docs.indexOf(keyword[j+1])!=-1)

intermittent=intermittent;

else

intermittent=intermittent;

}

}

else if(Operators[j].equals("OR"))

{

if(j==0)

{

if((docs.indexOf(keyword[j])!=-1) || (docs.indexOf(keyword[j+1])!=-1))

intermittent=true;

else

intermittent=false;

continue;

}

else

{

if(docs.indexOf(keyword[j+1])!=-1 )

intermittent=intermittent|| true;

else

intermittent=intermittent|| false;

}

}

else if(Operators[j].equals("ANDNOT"))

{

if(j==0)

{

if((docs.indexOf(keyword[j])!=-1) && (docs.indexOf(keyword[j+1])==-1))

intermittent=true;

else

intermittent=false;

continue;

}

else

{

if(docs.indexOf(keyword[j+1])==-1)

intermittent=intermittent && true;

else

intermittent=intermittent && false;

}

}

}

if(intermittent)

Foundln[foundcount++]="doc"+i+".txt";

}

else

{

if(docs.indexOf(keyword[0])!=-1)

Foundln[foundcount++]="doc"+i+".txt";

}

}

if(foundcount==0)

System.out.println("NotFound in Any Document");

else

{

for(int j=0;j<foundcount;j++)

System.out.println(Foundln[j]);

}

}

}

Input files

Doc1.txt

encryption is to encrypt

decryption is to decrypt

Doc2.txt

Encryption

Doc3.txt

Decryption

Output

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>javac BooleanSearch.java

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>java BooleanSearch

Allowed-AND/OR?ANDNOT

Enter the search string:

encryption

The string found in following documents

doc1.txt

doc2.txt

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>java BooleanSearch

Allowed-AND/OR?ANDNOT

Enter the search string:

decryption

The string found in following documents

doc1.txt

doc3.txt

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>java BooleanSearch

Allowed-AND/OR?ANDNOT

Enter the search string:

encryption AND decryption

The string found in following documents

doc1.txt

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>java BooleanSearch

Allowed-AND/OR?ANDNOT

Enter the search string:

encryption OR decryption

The string found in following documents

doc1.txt

doc2.txt

doc3.txt

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>java BooleanSearch

Allowed-AND/OR?ANDNOT

Enter the search string:

encryption ANDNOT decryption

The string found in following documents

doc2.txt

D:\College\4th Year (BE)\SEM II\CLP II\CLP-II PART-B IR\Assignment-4 Boolean Search Technique\BooleanSearc>java BooleanSearch

Allowed-AND/OR?ANDNOT

Enter the search string:

decryption ANDNOT encryption

The string found in following documents

doc3.txt