Information Retrieval – Spring 2023 Assignment # 2

Corpus: For this assignment use Corpus 2.

Program: score

Write a program for ranking top 10 documents against a given query. You have been provided with 10 documents and 4 queries in "Corpus 2".

- The program should show two options for ranking i.e.
 - i. **tf-idf**
 - ii. cosine
 - o The program should
 - tokenize
 - exclude all stop words (Stopwords.txt contains list of stopwords)
 - achieve stems (you can use some existing program for stemming)
 - construct tf-idf matrix for all terms and documents.
 - convert each document in unit vector (dividing by the magnitude of each document)

Program: Test

Write a program test

- o Test program should read the 4 query files one by one)
- As per given query the program should rank all the documents and return them against query (display the links of the documents as provided by google search)
- o For ranking use tf-idf score or cosine similarity measure which should be chosen at the start of the execution of your program.
- o Compare and analyze the results of both the techniques.

Submission

You should submit a zip archive containing:

• Programs **score** and **test** (source and executable)

As part of the grading, we will run your programs against the test data and some other query.