CS4051-IR Week02

## Chapter No. 2 The term vocabulary and postings lists

## <Food for Thoughts>

- 1. Explain what we mean by document processing pipeline for IR system.
- 2. What are the two main morphological transformation for English language?
- 3. What are the challenges in Document Processing? Explain each with an example.
- 4. Differentiate between Stemming and Lemmatization of a natural language token(word).
- 5. We have a two-word query. For one term the postings list consists of the following 16 entries:

[4,6,10,12,14,16,18,20,22,32,47,81,120,122,157,180] and for the other it is the one entry postings list: [47]

Work out how many comparisons would be done to intersect the two postings lists with the following two strategies. Briefly justify your answers:

- a. Using standard postings lists
- b. Using postings lists stored with skip pointers, with a skip length of  $\sqrt{P}$ , as suggested in Section 2.3.
- 6. What do we mean by extended bi-words? How it is useful?
- 7. How positional indexing support phrase and proximity queries? Explain each with an example.
- 8. How a combination of bi-word indexing and positional indexing benefits an IR system?