**MAI372– Natural Language Processing**

**III MSc AIM**

**11-02-2025**

**Regular lab Question**

**Lab Exercise 3:**

1. Write a program to get synonyms from WordNet. (for instance: - bear, set, square, lead, criteria) a) Find the 3rd meaning of the word in the list.

b) Extract the nouns of the word from the synonyms list.

c) Extract the verbs of the word from the synonyms list.

d) Extract the adjectives of the word from the synonyms list.

e) Extract the adverbs of the word from the synonyms list.

f) Extract the definition of the word. (For instance, ‘Bear’ - massive plantigrade carnivorous or omnivorous mammals with long shaggy coats and strong claws)

g) Write a program to get Antonyms from WordNet.

h) Write a program for lemmatizing words Using WordNet (Use all type of stemmers for the comparison).

i) Write a program to differentiate stemming and lemmatizing words.

j) Write a program for PoS Tagging and also execute any of the tool that given in class. k) Write a program to identify the Named Entity Recognition and also execute any of the tool that given in class.

l) Implement the Dependency Parsing and Constituency Parsing using the tool. **Program Evaluation Rubrics**

| Implementation | 2 Marks |
| --- | --- |
| Concept Clarity | 2 Marks |
| Formatting and Validation | 2 Marks |
| Complexity | 2 Marks |
| Interpretation | 2 Marks |

**General Instructions**

• The file you have to save with your name, last 3 digits of register number and program number “Aaron\_201\_Lab1”.

• The implemented code you have to download and upload in the Google Class room in the given scheduled time.