

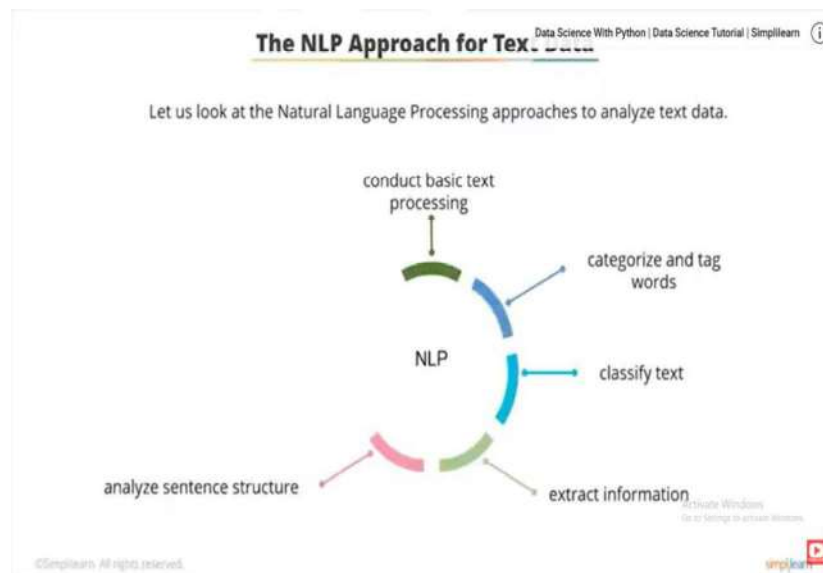
### Innovative Teaching Practice

**Faculty Name** : Mrs.P.Sandhya Krishna,Mr.B.V.Suresh Kumar  
**Course Name** : Artificial Intelligence  
**Class** : III B.Tech I Semester  
**Academic Year** : 2024-2025  
**Title of the Topic** : Enabling AI to Interpret Human Language through Natural Language Processing  
**Activity Name** : Flipped Classroom

#### **Objective of the Activity:**

The objective of the Flipped Classroom is to shift traditional teaching methods by delivering instructional content outside of class, often through videos or online resources, and using in-class time for interactive activities, discussions.

#### **Video Lecture Links**



<https://youtu.be/6WpnmkYys?si=-qHqlfmBUmlCPadB>

## Class Activity: Group Discussion

**Objective:** The objective of the topic of "Enabling AI to Interpret Human Language Through NLP" would be to explore the technical, practical, and ethical dimensions of using Natural Language Processing (NLP) to enable AI systems to understand and process human language effectively.

### Group Division:

**Group A:** Text Preprocessing and Representation

**Group B:** Syntax and Parsing

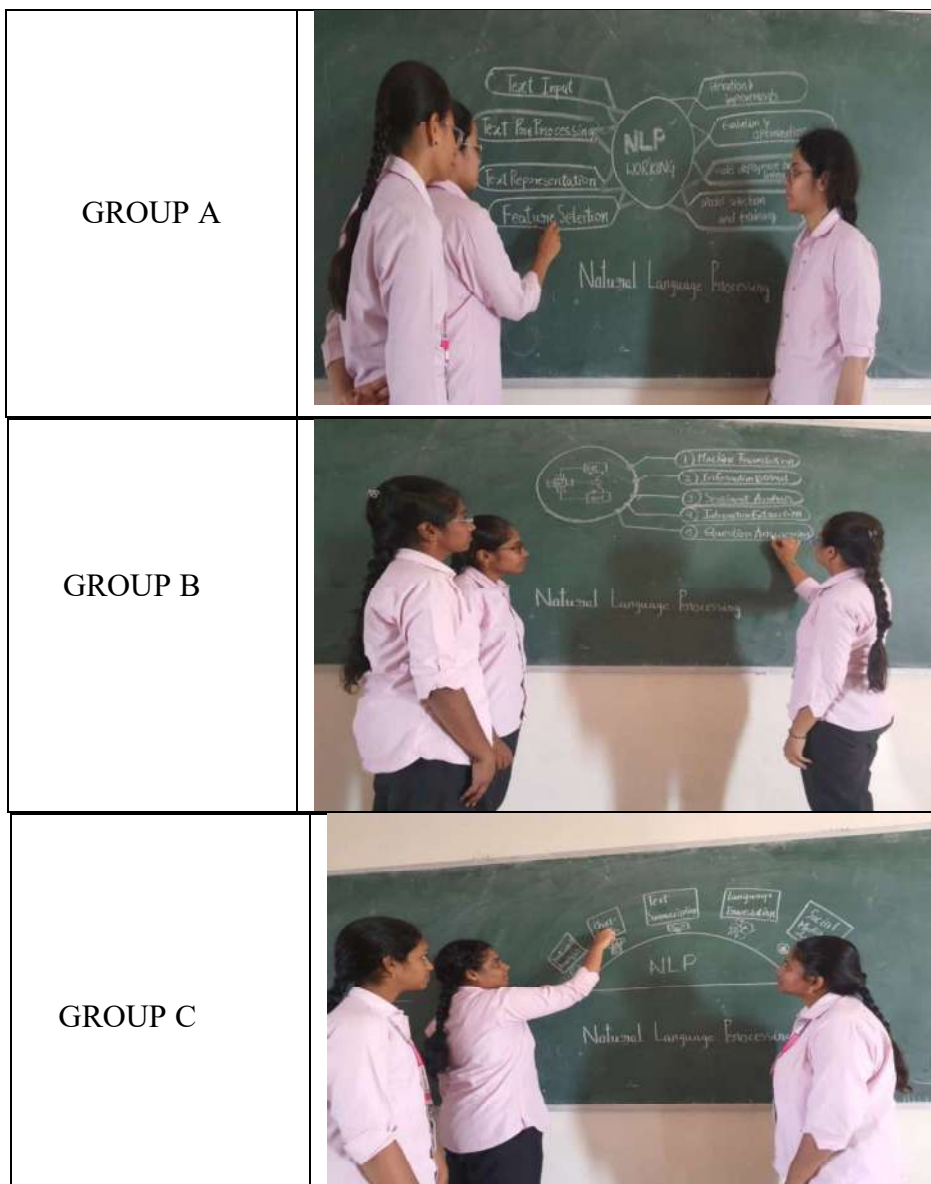
**Group C:** Machine Translation

**Group D:** Text Generation and Summarization

**Group E:** Speech Recognition and Processing

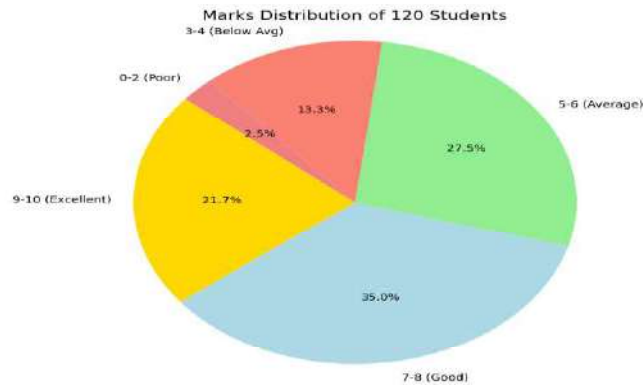
**Group F:** Applications of NLP

### Screenshots of the Practice



## Assessment Analysis

Marks Range	Number of Students	Percentage
9-10 (Excellent)	26	21.67%
7-8 (Good)	42	35.00%
5-6 (Average)	33	27.5%
3-4 (Below Avg)	16	13.33%
0-2 (Poor)	3	2.50%
Total	120	100%



## Conclusion

The group discussions on Artificial Intelligence (AI) demonstrated a strong grasp of the core concepts, with students actively engaging in meaningful conversations about various AI topics, such as problem-solving strategies, machine learning, and expert systems.

**Signature of the Faculty**

**Head of the Department**



**10. What is the primary purpose of stemming in NLP?**

- a) To convert words into their base or root form
- b) To remove stop words
- c) To tag parts of speech in text
- d) To translate text into another language

- **Which of the following is a technique used to break down text into smaller units such as words or sentences?**

Tokenization

- **Which method is used in NLP to determine the meaning of a word based on its context in a sentence?**

Word Sense Disambiguation

- **Which of the following is a type of syntactic analysis in NLP used to identify the structure of a sentence?**

Constituency Parsing

- **Which of these NLP tasks involves categorizing words into predefined categories such as nouns, verbs, adjectives, etc.?**

Part-of-Speech (POS) Tagging

- **Which technique is used in NLP to reduce words to their base form (e.g., "running" to "run")?**

Stemming

- **Which of the following is an example of a semantic processing task in NLP?**

Word Sense Disambiguation

- **Which NLP technique is used to generate a summary of a text by selecting important words or sentences from the original document?**

Extractive Summarization

- **What does Word2Vec model in NLP represent?**

Words as continuous vector representations

- **Which algorithm is typically used for machine translation tasks in NLP?**

Neural Machine Translation (NMT)

- **What is the primary purpose of stemming in NLP?**

To convert words into their base or root form