K. J. Somaiya College of Engineering, Mumbai-77
(A Constituent College of Somaiya Vidyavihar University)
Department of Computer Engineering

Batch: H2_1	**Roll No.:** 16010122151

Experiment No. 7

TITLE : To perform VLab on NLP

AIM: Vlab on NLP

Expected OUTCOME of Experiment:

CO5:   Apply data analytics in the field of Health care.

_____

Books/ Journals/ Websites referred:

Students have to list.

_____

Pre Lab/ Prior Concepts:

Students should have a basic understanding of word analysis.

 Procedure:

Vlab Name: Computer Science and Engineering -Natural Language Processing- Word Generation

Vlab Link: https://nlp-iiith.vlabs.ac.in/exp/morphology/

Morphology

Select a Root Word
नदी

Fill the add delete table here:

Delete	Add	Number	Case	Correction
ई	ई	sing	dr	✅
ई	इयाँ	plu	dr	✅
ई	ई	sing	ob	✅
ई	इयाँ	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word

माला ⌄

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ⌄	आ ⌄	sing	dr	✅
आ ⌄	आयँ ⌄	plu	dr	✅
आ ⌄	आ ⌄	sing	ob	✅
आ ⌄	आआँ ⌄	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word

लता ⌄

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ⌄	आ ⌄	sing	dr	✅
आ ⌄	आयँ ⌄	plu	dr	✅
आ ⌄	आ ⌄	sing	ob	✅
आ ⌄	आआँ ⌄	plu	ob	✅

Submit

Correct Answer!

Correct Answer!

Morphology

Select a Root Word

लड़का ∨

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ∨	आ ∨	sing	dr	✅
आ ∨	ए ∨	plu	dr	✅
आ ∨	ए ∨	sing	ob	✅
आ ∨	आँ ∨	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word

घोड़ा ∨

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ∨	आ ∨	sing	dr	✅
आ ∨	ए ∨	plu	dr	✅
आ ∨	ए ∨	sing	ob	✅
आ ∨	आँ ∨	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
गाथा ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ▾	आ ▾	sing	dr	✅
आ ▾	आयें ▾	plu	dr	✅
आ ▾	आ ▾	sing	ob	✅
आ ▾	आओं ▾	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
गली ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
ई ▾	ई ▾	sing	dr	✅
ई ▾	इयाँ ▾	plu	dr	✅
ई ▾	ई ▾	sing	ob	✅
ई ▾	इयाँ ▾	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
गधा ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ▾	आ ▾	sing	dr	✅
आ ▾	ए ▾	plu	dr	✅
आ ▾	ए ▾	sing	ob	✅
आ ▾	आँ ▾	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word

बच्ची ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
ई ▾	ई ▾	sing	dr	✅
ई ▾	इयाँ ▾	plu	dr	✅
ई ▾	ई ▾	sing	ob	✅
ई ▾	इयाँ ▾	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word

बच्चा ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ▾	आ ▾	sing	dr	✅
आ ▾	ए ▾	plu	dr	✅
आ ▾	ए ▾	sing	ob	✅
आ ▾	आँ ▾	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
शाखा ▼

Fill the add delete table here:

Delete	Add	Number	Case	Correction
आ ▼	आ ▼	sing	dr	✅
आ ▼	आयें ▼	plu	dr	✅
आ ▼	आ ▼	sing	ob	✅
आ ▼	आआं ▼	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
माली ▼

Fill the add delete table here:

Delete	Add	Number	Case	Correction
इ ▼	इ ▼	sing	dr	✅
इ ▼	इ ▼	plu	dr	✅
इ ▼	इ ▼	sing	ob	✅
इ ▼	इयां ▼	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
कूली ▼

Fill the add delete table here:

Delete	Add	Number	Case	Correction
इ ▼	इ ▼	sing	dr	✅
इ ▼	इ ▼	plu	dr	✅
इ ▼	इ ▼	sing	ob	✅
इ ▼	इयां ▼	plu	ob	✅

Submit

Correct Answer!

Morphology

Select a Root Word
जौहरी ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
इ ▾	इ ▾	sing	dr	✅
इ ▾	इ ▾	plu	dr	✅
इ ▾	इ ▾	sing	ob	✅
इ ▾	इयाँ ▾	plu	ob	✅

[Submit]

Correct Answer!

Morphology

Select a Root Word
आदमी ▾

Fill the add delete table here:

Delete	Add	Number	Case	Correction
इ ▾	इ ▾	sing	dr	✅
इ ▾	इ ▾	plu	dr	✅
इ ▾	इ ▾	sing	ob	✅
इ ▾	इयाँ ▾	plu	ob	✅

[Submit]

Correct Answer!

Thank you for your valuable feedback : Hyder Presswala

Date: 17-10-2024

Signature of faculty in-charge

Post Lab Descriptive Questions:

Q.1 Explain various applications of NLP.

Applictions of various NLP are:-

- **Chatbots and Assistants**: Enable conversational interfaces for user interaction.
- **Sentiment Analysis**: Gauge public opinion from feedback and social media.
- **Machine Translation**: Translate text between languages (e.g., Google Translate).
- **Text Classification**: Organize and categorize text (e.g., spam detection).
- **Information Extraction**: Pull structured data from unstructured text.
- **Named Entity Recognition**: Identify and classify entities in text.
- **Speech Recognition**: Convert spoken language into text.
- **Text Summarization**: Generate concise summaries of documents.
- **Recommendation Systems**: Personalize suggestions based on user preferences.
- **Medical Applications**: Analyze clinical notes and assist in diagnostics.
- **Legal Document Analysis**: Review and extract information from legal texts.
- **Educational Tools**: Provide personalized learning experiences and writing assistance.

Q.2 What is the significance of Natural Language Processing (NLP) in modern technology, and how does it impact various industries?

A) Natural Language Processing (NLP) plays a crucial role in modern technology, significantly impacting various industries in the following ways:

Significance in Modern Technology

- **Human-Computer Interaction**: NLP facilitates more intuitive interactions between users and machines, enabling technologies to understand and respond to natural language commands.
- **Data Processing and Analysis**: With vast amounts of unstructured data generated daily, NLP enables efficient processing, allowing businesses to extract valuable insights from text data.
- **Automation**: NLP automates repetitive tasks such as data entry, document classification, and customer service, improving efficiency and reducing operational costs.
- **Personalization**: It allows for personalized experiences by analyzing user preferences and behaviors, enhancing user engagement and satisfaction.

Impact on Various Industries

- **Healthcare**: NLP aids in analyzing clinical notes, extracting patient data, and supporting diagnostics, leading to improved patient care and outcomes.
- **Finance**: Financial institutions use NLP for sentiment analysis in trading, fraud detection, and analyzing regulatory compliance documents.
- **Retail**: NLP enhances customer experience through chatbots, personalized recommendations, and sentiment analysis of customer feedback.
- **Legal**: Law firms utilize NLP to review contracts, conduct legal research, and streamline document management, saving time and resources.
- **Education**: NLP-powered tools assist in automated grading, personalized learning, and language translation, making education more accessible.
- **Marketing**: Businesses leverage NLP for market research, brand monitoring, and targeted advertising based on customer sentiment and preferences.
- **Telecommunications**: NLP helps improve customer support by automating responses and analyzing customer interactions for service improvements.