NAME: Heet Dhanuka ROLL NO.: B - 34

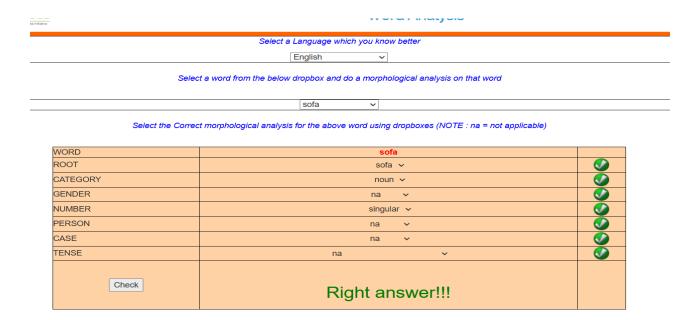
BATCH: B2

NLP PRACTICAL 1

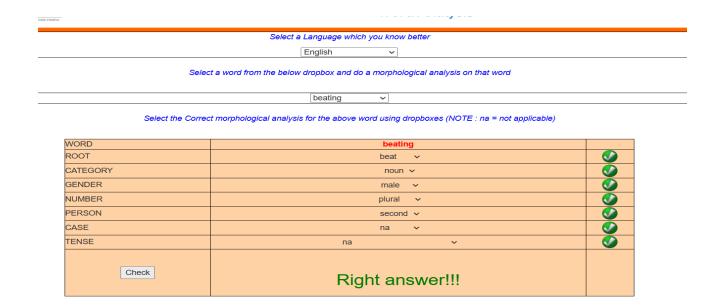
Word Analysis

Aim: A word can be simple or complex. For example, the word 'cat' is simple because one cannot further decompose the word into smaller parts. On the other hand, the word 'cats' is complex, because the word is made up of two parts: root 'cat' and the plural suffix '-s'.

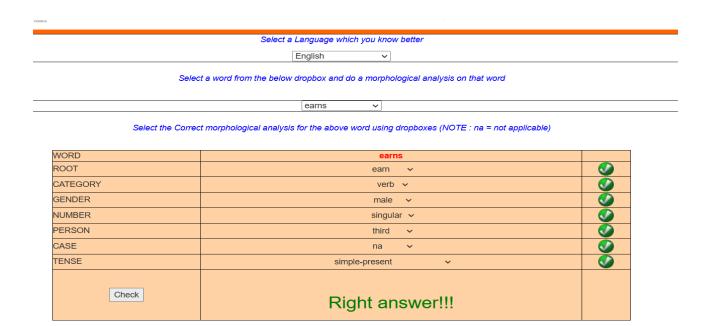
Screenshots:



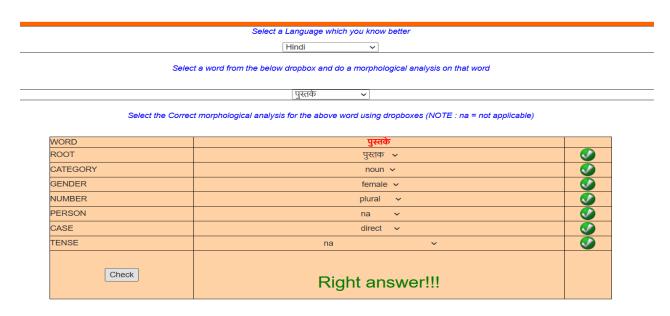
The word is sofa- root word is Sofa, it is a noun and gender is not present, which is singular with no case and belongs to no person and has no tense defined.



The word is beating - root word is beat, it is a noun, and gender is male, which is plural with no case and belongs to the second person and has no tense defined.



The word is earns - root word is earn, it is a verb, and gender is male present, which is singular with no case and belongs to the third person and is in the simple present tense.



The word is पुस्तके - root word is पुस्तक, it is a noun, and gender is female, which is plural with no case and belongs to no person and has no tense defined.



The word is सोऊँगा - root word is सो, it is a verb, and gender is male, which is singular with no case and belongs to the first person and is in the simple future tense.

Assignment:

1. Choose a typical masculine noun, ending in 'A', from your language. Write down its various forms along with various features and their values associated with them.

Answer: Actor

2. English has a suffix -en whose use is illustrated in the following lists:

List A	List B
Red	Redden
Mad	Madden
Soft	Soften
Wide	Widen
Sharp	Sharpen

In regard to these data, answer the following questions:

A. What part of speech does the suffix -en attach to? That is, what is the part of speech of the words in list A?

Answer: The suffix -en attaches to adjectives and sometimes to noun . The words in List A are adjectives.

B. When the suffix -en is attached to a word, what part of speech is the resulting word? Give some specific morphological properties of one of the words in list B, in order to justify your answer.

Answer: When the suffix -en is attached to a word, the resulting word becomes a verb. For example, soften (from soft) is a verb and can take verbal morphological properties such as tense (softened), aspect (is softening), and mood (soften the blow).

3. Take one verb from your mother tongue, gloss it (i.e., give the English meaning) and conjugate it in all tenses and aspects and persons.

Answer: I'll use a verb from Hindi: लिखना (likhna), which means "to write" in English. Below is the conjugation for all tenses, aspects, and persons:

Present Tense

- First person singular:
 - o Hindi: मैं लिखता हूँ / मैं लिखती हूँ (Main likhta hoon / Main likhti hoon)
 - o English: I write
- Second person singular:
 - o Hindi: तू लिखता है / तू लिखती है (Tu likhta hai / Tu likhti hai)
 - o English: You write
- Third person singular:
 - Hindi: वह लिखता है / वह लिखती है (Woh likhta hai / Woh likhti hai)
 - o English: He/She writes
- First person plural:
 - Hindi: हम लिखते हैं (Hum likhte hain)
 - o English: We write
- Second person plural:
 - o Hindi: तुम लिखते हो (Tum likhte ho)
 - o English: You all write
- Third person plural:
 - o Hindi: वे लिखते हैं (Woh likhte hain)
 - o English: They write

Past Tense

- First person singular:
 - o Hindi: मैंने लिखा (Maine likha)
 - English: I wrote
- Second person singular:
 - Hindi: तूने लिखा (Tune likha)
 - o English: You wrote
- Third person singular:
 - Hindi: उसने लिखा (Usne likha)
 - o English: He/She wrote
- First person plural:
 - Hindi: हमने लिखा (Humne likha)

- o English: We wrote
- Second person plural:
 - Hindi: तुमने लिखा (Tumne likha)
 - o English: You all wrote
- Third person plural:
 - Hindi: उन्होंने लिखा (Unhone likha)
 - o English: They wrote

Future Tense

- First person singular:
 - o Hindi: मैं लिख्ँगा / मैं लिख्ँगी (Main likhunga / Main likhungi)
 - o English: I will write
- Second person singular:
 - o Hindi: तू लिखेगा / तू लिखेगी (Tu likhega / Tu likhegi)
 - o English: You will write
- Third person singular:
 - o Hindi: वह लिखेगा / वह लिखेगी (Woh likhega / Woh likhegi)
 - o English: He/She will write
- First person plural:
 - Hindi: हम लिखेंगे (Hum likhenge)
 - English: We will write
- Second person plural:
 - o Hindi: तुम लिखोगे (Tum likhoge)
 - o English: You all will write
- Third person plural:
 - Hindi: वे लिखेंगे (Woh likhenge)
 - English: They will write

4. Refer to the following data and answer the question below:

```
List 1: taller, shorter, higher, lower, smarter <br>
List 2: mower, teacher, sailor, caller, operator <br>
List 3: never, cover, finger, river <br>>
```

Do the words ending with 'er'/'or' have some common features?

Answer:

Yes, the words ending with 'er' or 'or' in the given lists have distinct features.

List 1: These are comparative adjectives

List 2: These are agentive nouns

List 3: These are base words that happen to end in 'er' or 'or'

Common Features:

- In List 1 and List 2, 'er'/'or' is a meaningful suffix that adds specific grammatical or semantic value
- In List 3, 'er'/'or' is simply part of the root word and does not function as a suffix.
- **5**. Identify root and suffix in the following words:

kissed

stronger

Goodness

teacher

achievement

Answer:

Kissed

Root: KissSuffix: -ed

Stronger

Root: StrongSuffix: -er

Goodness

Root: GoodSuffix: -ness

Teacher

Root: TeachSuffix: -er

Achievement

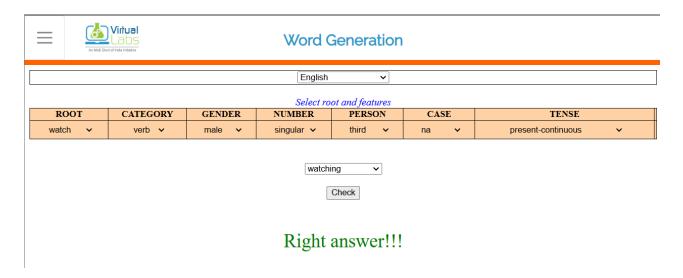
Root: AchieveSuffix: -ment

Word Generation

Aim: A word can be simple or complex. For example, the word 'cat' is simple because one cannot further decompose the word into smaller parts. On the other hand, the word 'cats' is complex, because the word is made up of two parts: root 'cat' and the plural suffix '-s'.

Screenshots:

1. watching



In this simulation, we have generated the word **watching** from the root word - **watch** by selecting the appropriate features:

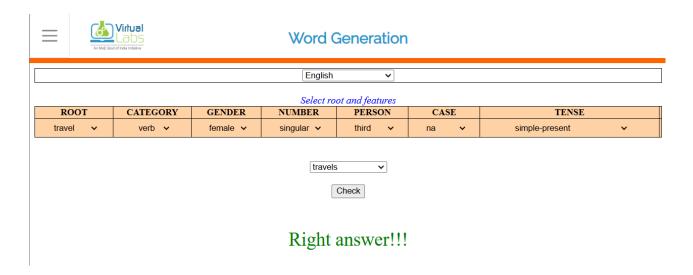
Category: verb
 Gender: male
 Number: singular

4. Person: third

5. Case: na (neither direct or oblique)

6. Tense: present-continuous

2. travels



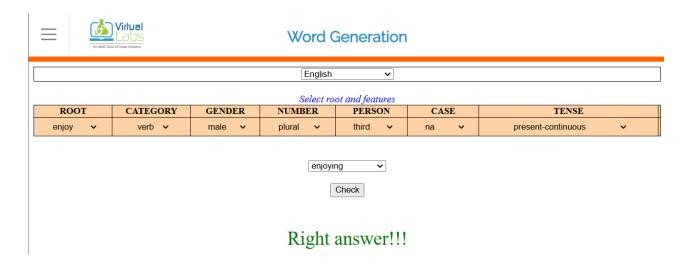
In this simulation, we have generated the word **travels** from the root word - **travel** by selecting the appropriate features:

Category: verb
 Gender: female
 Number: singular
 Person: third

5. Case: na (neither direct or oblique)

6. Tense: simple-present

3. enjoying



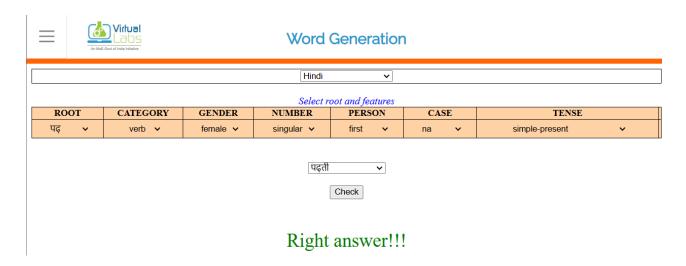
In this simulation, we have generated the word **enjoying** from the root word - **enjoy** by selecting the appropriate features:

Category: verb
 Gender: male
 Number: plural
 Person: third

5. Case: na (neither direct or oblique)

6. Tense: present-continuous

4. पढती



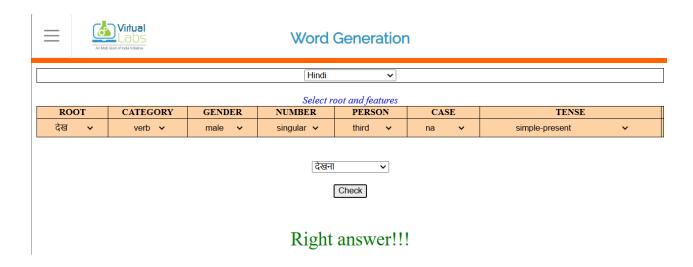
In this simulation, we have generated the word पढ़ती from the root word - पढ़ by selecting the appropriate features:

Category: verb
 Gender: female
 Number: singular
 Person: first

5. Case: na (neither direct or oblique)

6. Tense: simple-present

5. देखना



In this simulation, we have generated the word देखना from the root word - देख by selecting the appropriate features:

Category: verb
 Gender: male
 Number: singular
 Person: third

11. Case: na (neither direct or oblique)

12. Tense: simple-present

Assignment:

1. Generate words for the following features:

English:

root: boy category: noun number: singular root: child category: noun number: plural

root: play category: verb gender: male number: singular person:first tense: simple-present root: play category: verb gender: male number: singular person: third tense: simple-present

Hindi:

root: पुस्तक(pustak) category: noun gender: female number: singular case: direct root: बाग(bAg) category: noun gender: male number: singular case: oblique

root: खेल(khel) category: verb gender: female number: plural person: third tense: present-perfect

root: पढ़(paD) category: verb gender: female number: singular person: first tense: simple-future

Answer:

English:

- 1. boy (noun, singular)
- 2. children (noun, plural)
- 3. play (verb, male, singular, first person, simple-present)
- 4. plays (verb, male, singular, third person, simple-present)

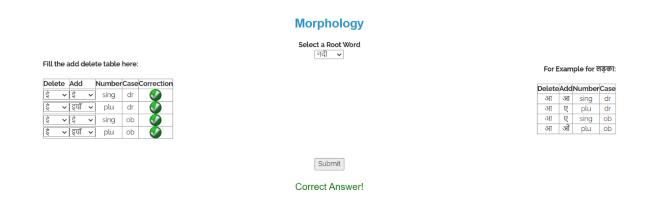
Hindi:

- 1. प्स्तक (noun, female, singular, direct case)
- 2. बाग (noun, male, singular, oblique case)
- 3. खेलें (verb, female, plural, third person, present-perfect)
- 4. पढूँगी (verb, female, singular, first person, simple-future)

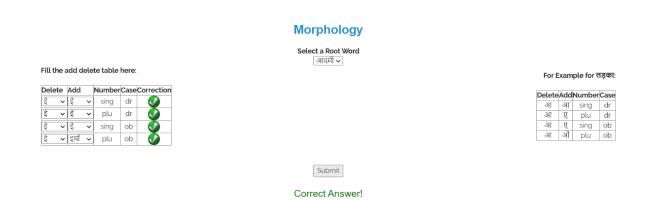
Morphology

Aim: Morphology is the study of the way words are built up from smaller meaning bearing units i.e., morphemes. A morpheme is the smallest meaningful linguistic unit.

Screenshots:



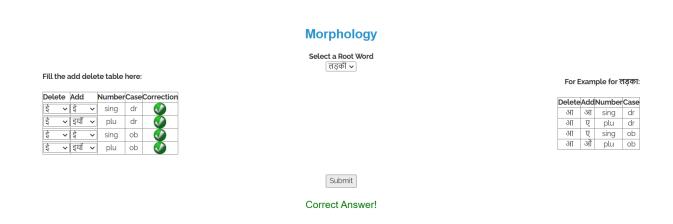
In this simulation we have selected a root word which is in hindi नदी .By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.



In this simulation we have selected a root word which is in hindi आदमी. By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.



In this simulation we have selected a root word which is in hindi लता .By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.



In this simulation we have selected a root word which is in hindi লड़की .By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Morphology

Select a Root Word

Fill the add delete table here:

Delete		Add		Number	Case	Correction
ई	~	\$	~	sing	dr	
ई	~	\$	~	plu	dr	
ई	~	ई	~	sing	ob	
ई	~	इयों	~	plu	ob	

For Example for লড়কা:

elete	Add	Number	Case
आ	आ	sing	dr
आ	Ų	plu	dr
आ	ए	sing	ob
आ	ओं	plu	ob

Submit

Correct Answer!

In this simulation we have selected a root word which is in hindi कूली.By adding and deleting the matras or variants in english to the root word along with it's singular and plural form and the cases we are able to analyze a word.

Assignment:

1. Select words from this which belong to the same paradigm: मनुष्य(manuShya), पक्षी(pakshii), शिश्(shishu), ग्रु(guruu), नर(nar).

Answer:

The words मनुष्य (manuShya), पक्षी (pakshii), शिशु (shishu), and नर (nar) share the same paradigm as masculine singular nouns referring to living beings. गुरु (guruu), while often masculine, stands apart because it can refer to both genders and has unique grammatical declensions.

So, मन्ष्य, पक्षी, शिश्, and नर fit better into the same group.

2. Construct the paradigm table for the above words.

Answer:

Case (Vibhakti)	मनुष्य (manuShya)	पक्षी (pakshii)	शिशु (shishu)	गुरु (guruu)	नर (nar)
1. Nominative (ਸ਼थमा)	3		(shishuḥ) शिशुः	गुरुः (guruḥ)	नरः (naraḥ)
2. Accusative मनुष्यम्		पक्षिनम्	शिशुम्	गुरुम्	नरम्
(द्वितीया) (manuShyam)		(pakshinam)	(shishum)	(gurum)	(naram)
3. Instrumental	मनुष्येण	पक्षिणा	शिशुना	(guruṇā)	नरेण
(ਜ੍ਰਜੀया)	(manuShyeṇa)	(pakshiṇā)	(shishunā)		(nareṇa)
4. Dative (ਚतुर्थी)	मनुष्याय	पक्षिणे	शिशवे	गुरवे	नराय
	(manuShyāya)	(pakshiṇe)	(shishave)	(gurave)	(narāya)
5. Ablative	मनुष्यात्	पक्षिणः	शिशोः	गुरोः	नरात् (narāt)
(ਧੁਤਾਹਸੀ)	(manuShyāt)	(pakshiṇaḥ)	(shishoḥ)	(guroḥ)	
6. Genitive (षष्ठी)	मनुष्यस्य	पक्षिणः	शिशोः	गुरोः	नरस्य
	(manuShyasya)	(pakshiṇaḥ)	(shishoḥ)	guroḥ)	(narasya)
7. Locative (सप्तमी)	मनुष्ये (manuShye)	पक्षिणि (pakshiṇi)	शिशौ (shishau)	गुरौ (gurau)	नरे (nare)
8. Vocative हे मनुष्य (he		हे पक्षिन् (he	हे शिशो (he	हे गुरो (he	हे नर (he
(संबोधन) manuShya)		pakshin)	shisho)	guro)	nara)

3. Observe the following words from Bengali. Identify all the morphemes and their corresponding meanings.

```
kori '(I)do'
maari '(I) hit'
korchille '(You) were doing'
maar '(You) hit'
```

Answer:

kori ('I do'):

- kor- (root meaning 'do')
- -i (1st person singular present tense marker)

maari ('I hit'):

- maar- (root meaning 'hit')
- -i (1st person singular present tense marker)

korchile ('You were doing'):

- kor- (root meaning 'do')
- -ch- (continuous aspect marker)
- -il- (past tense marker)
- -e (2nd person marker)

maar ('You hit'):

- maar- (root meaning 'hit')
- Ø (zero morpheme indicating 2nd person imperative)