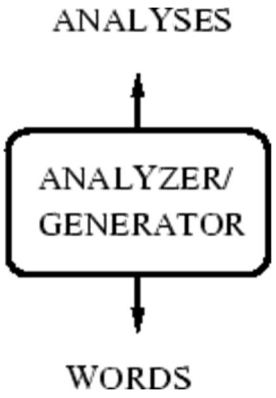
Word Generation

Aim:

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



Objective:

The objective of the experiment is to generate word forms from root and suffix information.

Procedure:

STEP 1: Select the language.

OUTPUT: Drop downs for selecting root and other features will appear.

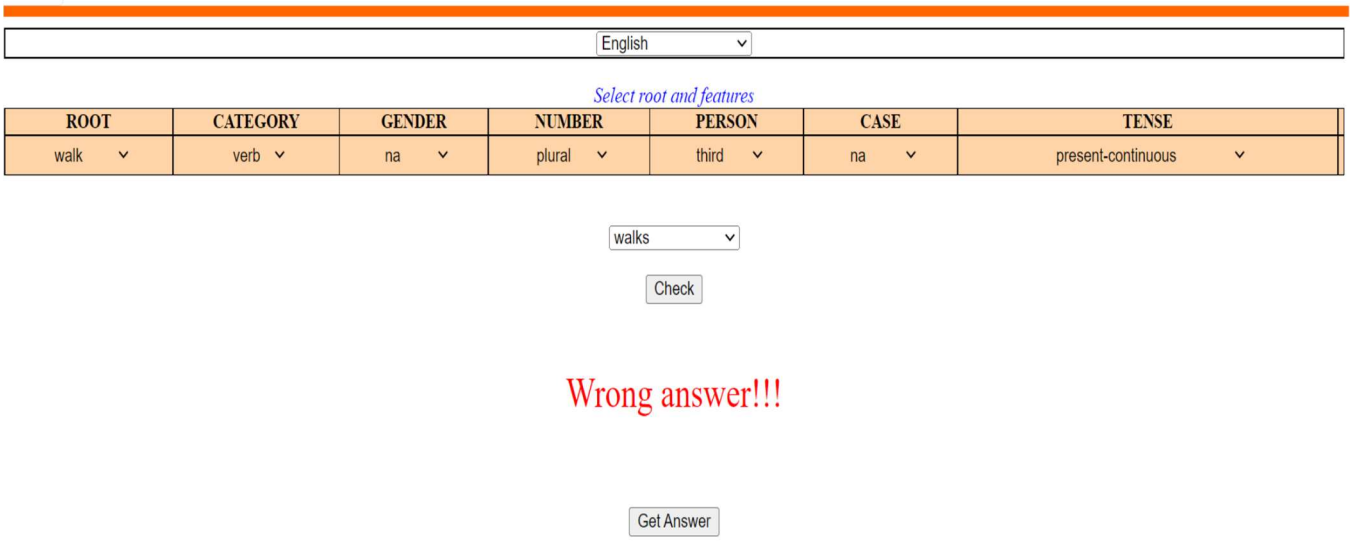
STEP 2: Select the root and other features.

STEP 3: After selecting all the features, select the word corresponding above features selected.

STEP 4: Click the check button to see whether right word is selected or not

OUTPUT: Output tells whether the word selected is right or wrong

Output



Theory:

Given the root and suffix information, a word can be generated. For example,

Language	input:analysis	output:word
Hindi	rt=लड़का(ladakaa), cat=n, gen=m, num=sg, case=obl	लड़के(ladake)
Hindi	rt=लड़का(ladakaa), cat=n, gen=m, num=pl, case=dir	लड़के(ladake)
English	rt=boy, cat=n, num=pl	boys
English	rt=play, cat=v, num=sg, per=3, tense=pr	plays

- Morphological analysis and generation: Inverse processes.
- Analysis may involve non-determinism, since more than one analysis is possible.
- Generation is a deterministic process. In case a language allows spelling variation, then till that extent, generation would also involve non-determinism.

Assignment

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