Linguistic morphology is the branch of linguistics that studies the structure of words and how they are formed.

* Morpheme : smallest unit of word like unhappy : un
* Inflection : process of adding affixes
* Derivation : process of creating new word from exting
* Stemming
* Lemmatization

Morphological analysis with finite-state transducers (FSTs)

* FSTs are computational models that can recognize and generate strings of symbols, such as words in a language, based on rules with input symbols.
* FST used to make a word, such as roots, prefixes, and suffixes,
* It is used to generate the inflected forms of words from their base forms.
* FSTs can help improve the accuracy of NLP algorithms that rely on morphological analysis

Foma (Finite-State Machine Compiler and Library) :

With the help of foma we can easily creating, editing, and applying FSTs.

* Regular expressions
* Lexical transducers
* Composition and intersection