# **Module-5: Chunking**

#### Data used:

We used the gold POS tagged data wherein there were files for Hindi as well as English sentences. Each line had one sentence POS tagged words.

The tag and the word were separated by an '\_'.

The data consisted of twenty sentences for training in English as well as Hindi. Similarly testing data consisted of ten sentences each for Hindi and English.

## **Procedure for Chunking:**

The training sentences were manually analysed and intuitive chunks were made. According to this analysis, the rules were devised.

## Tagset used:

CC

1.

		3
2.	CD	Cardinal number
3.	DT	Determiner
4.	EX	Existential there
5.	FW	Foreign word
6.	IN	Preposition or subordinating conjunction
7.	JJ	Adjective
8.	JJR	Adjective, comparative
9.	JJS	Adjective, superlative
10.	LS	List item marker
11.	MD	Modal
12.	NN	Noun, singular or mass
13.	NNS	Noun, plural
14.	NNP	Proper noun, singular
15.	NNPS	Proper noun, plural
16.	PDT	Predeterminer
17.	POS	Possessive ending
18.	PRP	Personal pronoun
19.	PRP\$	Possessive pronoun
20.	RB	Adverb
21.	RBR	Adverb, comparative
22.	RBS	Adverb, superlative
23.	RP	Particle
24.	SYM	Symbol

Coordinating conjunction

25. TO to 26. UH Interjection 27. VB Verb, base form 28. VBD Verb, past tense 29. VBG Verb, gerund or present participle 30. VBN Verb, past participle 31. VBP Verb, non-3rd person singular present 32. VBZ Verb, 3rd person singular present 33. WDT Wh-determiner 34. WP Wh-pronoun 35. WP\$ Possessive wh-pronoun 36. WRB Wh-adverb 37. PSP Post-position 38. PSPP Post-positional Phrase 39. JJP Adjectival Phrase 40. RPP Particle Phrase

#### **Observations:**

41. RBP

We have avoided redundancy of rules.

Adverbial Phrase

- We have taken care that the rules are as condensed as possible and hence never is there a
  rule where one tag goes to just one another.
- We have taken into consideration sentences that contain sub-sentences.
- It has been observed that English makes use of Preposition while Hindi uses Postpositions.
- To properly tag postpositional phrases, we have introduced the PSPP chunk.
- As Hindi is a language that allows free-word order, there can be many possibilities for each chunk.