

Assignment 6(Deliverable3_4)

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Deliverable 3: Respond to Exercise 12.10 from J&M 2nd Ch12 for at least one Wh- terminal. The lexicon and grammar in Figures 10.2 and 10.3 should be enough. If not indicate any other terminals and rules necessary. Obviously the Wh- you chose needs to be a terminal. You are welcome to search the WWW for help here; be sure to show references to the sites you use

Solution:

Wh-NP →

| who-NP → who VP NP

| whom-NP → whom VP

| whose-NP → whose NP

| which-NP → which NP

| what-NP → what NP

Deliverable 4: Chapter 10 of J&M 3rd and Chapter 5 of BKL demonstrate several taggers. Make a list of them and any others you can find with a brief statement as to what they do, what is distinctive about them, and what is like the other taggers in the chapter. You can show them with a table of at least 4 columns: ID, Description, Distinctive Feature(s), and “Similar To”. The Description should include words used in both J&M 2nd and 3rd and BKL, such as “bidirectional MEMM-style”, “regular expression tagger”, “lookup tagger”, etc. to distinguish the taggers.

Solution:

ID	Description	Distinctive Feature(s)	"Similar To"
RegexpTagger	regular expression tagger	user inputs patterns for determining tags	patterns are similar to rules in rule-based taggers
Unigram Tagger	lookup tagger	user chooses tagged text to determine tagging of another text	stochastic tagger - tags based on the most frequent tagged words from the model like how the stochastic tagger uses the probability that a tag is correct based on a training corpus
HMM Tagger	stochastic tagger	tagging is determined by using a training corpus to compute the probability of a given word having a given tag in a given context	lookup tagger- tags based on frequent words from a tagged text to determine word's tag, like how stochastic uses probability to determine a word's tag
EngCG	rule-based tagger	rules define ambiguous word's tag, based on a two-level morphology	regex taggers
Brill Tagger	transformation based tagger	based on rules determining when a word should have a tag with a machine learning component	rule-based and stochastic taggers

