

CS-5340/6340, Written Assignment #1
Anirudh Narasimhamurthy(u0941400)

1. (40 pts, 1/2 pt per word) For each sentence below, label each word with its correct part-of-speech (POS) tag based upon the word's use in the sentence. Punctuation should be ignored.
- (a) Dan slid sideways down the hill and broke out in laughter.
Solution: Dan/NOUN slid/VERB sideways/ADV down/PART the/ART hill/NOUN and/CONJ broke/VERB out/PART in/PREP laughter/NOUN
- (b) Children may like candy but eating sugary foods is unhealthy.
Solution: Children/NOUN may/MOD like/VERB candy/NOUN but/CONJ eating/GER sugary/ADJ foods/NOUN is/VERB unhealthy/ADJ
- (c) My brother did not plan to take sleeping pills although he got no sleep yesterday.
Solution: My/POSSPRO brother/NOUN did/VERB not/ADV plan/VERB to/INF take/VERB sleeping/GER pills/NOUN although/CONJ he/PERPRO got/VERB no/ADV sleep/VERB yesterday/ADV
- (d) He often snores like an aardvark.
Solution: He/PERPRO often/ADV snores/VERB like/PREP an/ART aardvark/NOUN
- (e) Mary ran inside after rain began to fall.
Solution: Mary/NOUN ran/VERB inside/PREP after/CONJ rain/NOUN began/VERB to/INF fall/VERB
- (f) The armed man took off when police showed up.
Solution: The/ART armed/ADJ man/NOUN took/VERB off/PART when/CONJ police/NOUN showed/VERB up/PART
- (g) The kittens sleeping in her lap are very young.
Solution: The/ART kittens/NOUN sleeping/GER in/PREP her/POSSPRO lap/NOUN are/VERB very/ADV young/ADJ
- (h) She just completed a singing competition, which could make her a star.
Solution: She/PERPRO just/ADV completed/VERB a/NOUN singing/GER competition/NOUN, which/RELPRO could/MOD make/VERB her/POSSPRO a/ART star/ADJ

2. (20 pts) For each sentence below, indicate whether the main verb appears in an *intransitive* construction, a *transitive* construction, or a *ditransitive* construction. Only give the answer *transitive* if the usage is not *ditransitive*.

(a) The dog barked at the cat.

Solution: transitive

(b) The man fed the squirrels peanuts.

Solution: ditransitive

(c) Susan slept for ten hours.

Solution: intransitive

(d) George broke the window with his fist.

Solution: ditransitive

(e) Mary loaned her neighbor a bicycle for a week.

Solution: ditransitive

(f) Ted donated five hundred dollars to his favorite charity.

Solution: transitive

(g) Wilma married Fred in a rock quarry.

Solution: transitive

(h) Sam bought flowers for his mom.

Solution: ditransitive

(i) The cat frequently sits on the front porch.

Solution: transitive

(j) She gave a raise to her best employee for his great work.

Solution: transitive

3. (20 pts) For each sentence below, indicate whether the main verb appears in an *active* voice verb phrase or a *passive* voice verb phrase.

(a) Dr. Seuss has written many books.

Solution: Active voice

(b) Tim will be organizing a charity event.

Solution: Active voice

(c) Cathy has been hired by IBM.

Solution: Passive voice

(d) Walter will be evaluated for a raise in October.

Solution: Passive voice

(e) Tropical storm Fred has strengthened into a hurricane.

Solution: Active voice

(f) The battle is being fought on several fronts.

Solution: Passive voice

(g) The cougar was hiding in a bush.

Solution: Active voice

(h) The dog has been taught twenty difficult tricks.

Solution: Passive voice

(i) She will have achieved a record in gymnastics.

Solution: Active voice

(j) He should have won the award.

Solution: Active voice

4. (20 pts) Consider the following morphology rules and dictionary:

	Suffix	Prefix	Replacement Chars	POS of root word	POS of derived word
<i>Rule #1</i>	s	-	-	NOUN	NOUN
<i>Rule #2</i>	s	-	-	VERB	VERB
<i>Rule #3</i>	er	-	-	VERB	NOUN
<i>Rule #4</i>	-	re	-	VERB	VERB
<i>Rule #5</i>	-	anti	-	NOUN	ADJECTIVE

Dictionary	
Word	Part-of-Speech
seizure	NOUN
form	VERB

For each word below, indicate whether that word *CAN* or *CANNOT* be successfully derived as having the specified part-of-speech using the morphology rules and dictionary above:

- (a) antiseizure ADJECTIVE
Solution: CAN

- (b) seizures VERB
Solution: CANNOT

- (c) antiseizures NOUN
Solution: CANNOT

- (d) antiseizures ADJECTIVE
Solution: CAN

- (e) reforms NOUN
Solution: CANNOT

- (f) reforms VERB
Solution: CAN

- (g) antireform ADJECTIVE
Solution: CANNOT

- (h) rereform VERB
Solution: CANNOT

- (i) reformer NOUN
Solution: CAN

- (j) reformers VERB
Solution: CAN

Question #5 is for CS-6340 students ONLY!

5. (15 pts) Consider the following five subcategorization frames:

NP
NP NP
PP(against)
PP(from) PP(to)
VP(to)

For each verb below, list ALL of the subcategorization frames in the list above that should be associated with the verb. If a verb should not have ANY of these subcategorization frames, then give the answer *NONE*.

HINT: most of the verbs should have 1 or 2 of the subcategorization frames in the list above.

- (a) snore

Solution:

- (b) drive

Solution: VP, PP(from) PP(to)

- (c) expect

Solution: VP(to)

- (d) fight

Solution: PP, VP, NP

- (e) sip

Solution:

- (f) sing

Solution: NP NP, NP, VP

- (g) lean

Solution: PP(against)

- (h) smile

Solution:

(i) lend

Solution: NP NP, NP

(j) increase

Solution: PP(from) PP(to) VP(to)