```
1. Example: The city councilmen refused the demonstrators a permit {
    Tokens: [the, city, councilmen, refused, the, demonstrators, a, permit]
    Lemmatized tokens: [the, city, councilmen, refuse, the, demonstrator, a,
permit1
    POS tags: [DT, NN, NN, VBD, DT, NNS, DT, NN]
    NER tags: [0, 0, 0, 0, 0, 0, 0]
    Dependency children: [[], [], [det->0, compound->1], [dep->2, dobj->5,
nsubj->7], [], [det->4], [], [det->6]]
  }
2. Example: Joan made sure to thank Susan for all the help she had received {
    Tokens: [joan, made, sure, to, thank, susan, for, all, the, help, she, had,
received]
    Lemmatized tokens: [Joan, make, sure, to, thank, Susan, for, all, the, help,
she, have, receive]
    POS tags: [NNP, VBD, JJ, TO, VB, NNP, IN, PDT, DT, NN, PRP, VBD-AUX, VBN]
    NER tags: [PERSON, 0, 0, 0, 0, PERSON, 0, 0, 0, 0, 0, 0]
    Dependency children: [[], [nsubj->0, xcomp->2], [xcomp->4], [], [mark->3,
dobj->5], [nmod:for->9], [], [], [case->6, det:predet->7, det->8, acl:relcl-
>12], [], [], [nsubj->10, aux->11]]
  }
3. Example: Sara borrowed the book from the library because she needs it for an article she is
working on. She writes it when she gets home from work. {
    Tokens: [sara, borrowed, the, book, from, the, library, because, she, needs,
it, for, an, article, she, is, working, on, ., she, writes, it, when, she, gets,
home, from, work, .]
    Lemmatized tokens: [Sara, borrow, the, book, from, the, library, because,
she, need, it, for, a, article, she, be, work, on, ., she, write, it, when, she,
get, home, from, work, .]
    POS tags: [NNP, VBD, DT, NN, IN, DT, NN, IN, PRP, VBZ, PRP, IN, DT, NN, PRP,
VBD-AUX, VBG, IN, ., PRP, VBZ, PRP, WRB, PRP, VBZ, NN, IN, NN, .]
    0, 0, 0, 0, 0, 0, 0, 0]
    Dependency children: [[], [nsubj->0, punct->18, dobj->3, nmod:from->6,
advcl->9], [], [det->2], [], [], [case->4, det->5], [], [], [mark->7, nsubj->8, dobj->10, nmod:for->13], [], [], [], [acl:relcl->16, case->11, det->12], [], [], [aux->15, nmod->17, nsubj->14], [], [], [], [dobj->21, advcl->24, punct->28, nsubj->19], [], [], [advmod->22, nsubj->23, dobj->25, nmod:from->27], [],
[], [case->26], []]
  }
```

CC: conjunction, coordinating

& 'n and both but either et for less minus neither nor or plus so therefore times v. versus vs. whether yet

CD: numeral, cardinal

mid-1890 nine-thirty forty-two one-tenth ten million 0.5 one forty-seven 1987 twenty '79 zero two 78-degrees eighty-four IX '60s .025 fifteen 271,124 dozen quintillion DM2,000 ...

DT: determiner

all an another any both del each either every half la many much nary neither no some such that the them these this those

EX: existential there

there

FW: foreign word

gemeinschaft hund ich jeux habeas Haementeria Herr K'ang-si vous lutihaw alai je jour objets salutaris fille quibusdam pas trop Monte terram fiche oui corporis ...

IN: preposition or conjunction, subordinating

astride among uppon whether out inside pro despite on by throughout below within for towards near behind atop around if like until below next into if beside ...

JJ: adjective or numeral, ordinal

third ill-mannered pre-war regrettable oiled calamitous first separable ectoplasmic battery-powered participatory fourth still-to-be-named multilingual multi-disciplinary ...

JJR: adjective, comparative

bleaker braver breezier briefer brighter brisker broader bumper busier calmer cheaper choosier cleaner clearer closer colder commoner costlier cozier creamier crunchier cuter ...

JJS: adjective, superlative

calmest cheapest choicest classiest cleanest clearest closest commonest corniest costliest crassest creepiest crudest cutest darkest deadliest dearest deepest densest dinkiest ...

LS: list item marker

A A. B B. C C. D E F First G H I J K One SP-44001 SP-44002 SP-44005 SP-44007 Second Third Three Two * a b c d first five four one six three two

MD: modal auxiliary

can cannot could couldn't dare may might must need ought shall should shouldn't will would

NN: noun, common, singular or mass

common-carrier cabbage knuckle-duster Casino afghan shed thermostat investment slide humour falloff slick wind hyena override subhumanity machinist ...

NNS: noun, common, plural

undergraduates scotches bric-a-brac products bodyguards facets coasts divestitures storehouses designs clubs fragrances averages subjectivists apprehensions muses factory-jobs ...

NNP: noun, proper, singular

Motown Venneboerger Czestochwa Ranzer Conchita Trumplane Christos Oceanside Escobar Kreisler Sawyer Cougar Yvette Ervin ODI Darryl CTCA Shannon A.K.C. Meltex Liverpool ...

NNPS: noun, proper, plural

Americans Americas Amharas Amityvilles Amusements Anarcho-Syndicalists Andalusians Andes Andruses Angels Animals Anthony Antilles Antiques Apache Apaches Apocrypha ...

PDT: pre-determiner

all both half many quite such sure this

POS: genitive marker

' 's

PRP: pronoun, personal

hers herself him himself hisself it itself me myself one oneself ours ourselves ownself self she thee theirs them themselves they thou thy us

PRP\$: pronoun, possessive

her his mine my our ours their thy your

RB: adverb

occasionally unabatingly maddeningly adventurously professedly stirringly prominently technologically magisterially predominately swiftly fiscally pitilessly ...

RBR: adverb, comparative

further gloomier grander graver greater grimmer harder harsher healthier heavier higher however larger later leaner lengthier lessperfectly lesser lonelier longer louder lower more ...

RBS: adverb, superlative

best biggest bluntest earliest farthest first furthest hardest heartiest highest largest least less most nearest second tightest worst

RP: particle

aboard about across along apart around aside at away back before behind by crop down ever fast for forth from go high i.e. in into just later low more off on open out over per pie raising start teeth that through under unto up up-pp upon whole with you

SYM: symbol

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% & ' '''.)). * + ,. < = > @ A[fi] U.S U.S.S.R * ** ***
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TO: "to" as preposition or infinitive marker

to

UH: interjection

Goodbye Goody Gosh Wow Jeepers Jee-sus Hubba Hey Kee-reist Oops amen huh howdy uh dammit whammo shucks heck anyways whodunnit honey golly man baby diddle hush sonuvabitch ...

VB: verb, base form

ask assemble assess assign assume atone attention avoid bake balkanize bank begin behold believe bend benefit bevel beware bless boil bomb boost brace break bring broil brush build ...

VBD: verb, past tense

dipped pleaded swiped regummed soaked tidied convened halted registered cushioned exacted snubbed strode aimed adopted belied figgered speculated wore appreciated contemplated ...

VBG: verb, present participle or gerund

telegraphing stirring focusing angering judging stalling lactating hankerin' alleging veering capping approaching traveling besieging encrypting interrupting erasing wincing ... VBN: verb, past participle multihulled dilapidated aerosolized chaired languished panelized used experimented flourished imitated reunifed factored condensed sheared unsettled primed dubbed desired ...

VBP: verb, present tense, not 3rd person singular predominate wrap resort sue twist spill cure lengthen brush terminate appear tend stray glisten obtain comprise detest tease attract emphasize mold postpone sever return wag ...

VBZ: verb, present tense, 3rd person singular bases reconstructs marks mixes displeases seals carps weaves snatches slumps stretches authorizes smolders pictures emerges stockpiles seduces fizzes uses bolsters slaps speaks pleads ...

WDT: WH-determiner that what whatever which whichever

WP: WH-pronoun that what whatever whatsoever which who whom whosoever

WP\$: WH-pronoun, possessive

whose WRB: Wh-adverb

how however whence whenever where whereby whereever wherein whereof why