

Example:

Using the following CFG in CNF and the CKY algorithm find all parses of the sentence:
“Can I walk through the forest at night”

Grammar	Lexicon
$S \rightarrow VP$	$Det \rightarrow that$
$S \rightarrow NP VP$	$Det \rightarrow a$
$S \rightarrow X VP$	$Det \rightarrow the$
$X \rightarrow Aux NP$	$Noun \rightarrow money$
$NP \rightarrow Nominal$	$Noun \rightarrow flights$
$NP \rightarrow Pronoun$	$Noun \rightarrow dinner$
$NP \rightarrow Proper-Noun$	$Noun \rightarrow night$
$NP \rightarrow Det Nominal$	$Verb \rightarrow book$
$Nominal \rightarrow Noun$	$Verb \rightarrow prefer$
$Nominal \rightarrow Nominal Noun$	$Verb \rightarrow walk$
$Nominal \rightarrow Nominal PP$	$Pronoun \rightarrow I$
$VP \rightarrow Verb$	$Pronoun \rightarrow she$
$VP \rightarrow Verb NP$	$Pronoun \rightarrow me$
$VP \rightarrow Verb PP$	$Pronoun \rightarrow you$
$VP \rightarrow X_2 PP$	$Proper-Noun \rightarrow Houston$
$VP \rightarrow X_2 NP$	$Proper-Noun \rightarrow NWA$
$X_2 \rightarrow Verb NP$	$Aux \rightarrow does$
$VP \rightarrow VP PP$	$Aux \rightarrow can$
$PP \rightarrow Preposition NP$	$Preposition \rightarrow to$
	$Preposition \rightarrow on$
	$Preposition \rightarrow through$
	$Preposition \rightarrow at$