Ander Swartz **NLP HW# 4 Report** 3/31/22

2.1:

Number of unique rules: 754

Top 5 most frequent rules in training: [(('PUNC', '.'), 346), (('TO', 'to'), 241), (('PP', ('IN', 'NP\_NNP')), 239), (('IN', 'from'), 218), (('PP', ('IN', 'NP')), 197)]

2.2:

NNP -> San # -3.765534746362977

NNP -> City # -3.8144443468439233

NNP -> New # -4.028569152196771

NNP -> Las # -4.087462841250339

NNP -> Vegas # -4.087462841250339

3.1:

First five parses on dev.strings and their scores :

(TOP (S (S (NP (PRP I)) (VP (MD would) (VP (VB like) (S (NP (PRP it)) (VP (TO to) (VP (VBP have) (NP (NP (DT a) (NN stop)) (PP (IN in) (NP (NNP New) (NNP York)))))))))) (CC and) (S (NP (PRP I)) (VP (MD would) (VP (VB like) (NP (NP (DT a) (NN flight)) (SBAR (WHNP (WDT that)) (S (VP (VBZ serves) (ADVP (RB <unk>)))))))))) (PUNC .))

(TOP (SBARQ (WHNP (WHNP (WDT Which)) (PP (IN of) (NP (DT these)))) (SQ (VP (VBP serve) (NP (NN dinner))))) (PUNC ?))

(TOP (SBARQ (WHNP (WDT Which) (NNS ones)) (SQ (VP (VBP stop) (PP (IN in) (NP (NNP Nashville)))))) (PUNC ?))

(TOP (SQ (VBP <unk>) (NP (NP (EX there))) (NP (DT any) (NNS flights)) (VP (VBG arriving) (PP (IN after) (NP (CD eleven) (RB a.m))))) (PUNC ?))

0

-123.01744756947991

-29.150319409513738

-33.96155058440001

-53.78213453811314

3.2:

