

Homework 7 for LING 572

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1 Note

We applied the late submission to Professor Fei Xia, with the new due by March 2. Thanks for your understanding.

2 Q2

Table 1: Beam search

beam_size	topN	topK	Test accuracy	Running time
0	1	1	0.9657731770991439	00:00:55
1	3	5	0.9657731770991439	00:00:46
2	5	10	0.9657731770991439	00:00:46
3	10	100	0.9657731770991439	00:01:00

3 Q3

Conclusion: Because of the high accuracy of Maximum Entropy model, no matter how different our top K and top N, and beam size are, the test accuracies remain the same. This is mainly because the best path is obviously better than any other paths at every node.