

# LING 570: Hw7

## Due on Nov 18

All the example files are under `dropbox/09-10/570/hw7/examples/`.

**Q1 (60 points):** Write a script, **viterbi.sh**, that implements the Viterbi algorithm. You should be able to use some functions from your `check_hmm.sh` in Hw6.

⇒ See `fi193.exec`.

**Q2 (40 points):** Build trigram models with **wsj\_sec0.word\_pos** as the training data and test the models on the test data **test.word**.

⇒ For `proc_input.sh`, see `ga193-fall09.exec`.

⇒ For `conv_format.sh`, see `fg193-fall09.exec`.

⇒ For the experiments, see the subdirectories (e.g., the files for Expt #1 are stored under `1.0_0_0/`)

Table 1: Tagging accuracy

Expt Id	$\lambda_1$	$\lambda_2$	$\lambda_3$	tagging accuracy
1	1.0	0	0	81.95%
2	0.5	0.5	0	87.14%
3	0.2	0.8	0	88.32%
4	0.1	0.1	0.8	88.00%
5	0.2	0.3	0.5	88.16%