Q1:

1. Hmm-6 w150 err=15.44

Hmm-6 w400 err=36.84

Hmm-6 w150 err=10.53 without loop

Q2:

|  |  |  |
| --- | --- | --- |
| Num | Log prob | Evaluation error |
| 2 | -7.73 | 17.02 |
| 3 |  | 14.39 |
| 4 |  | 12.46 |
| 5 |  | 9.82 |
| 6 |  | 10.53 |

% grep "average log prob" hmm-2/train\*log

Reestimation complete - average log prob per frame = -7.732544e+01

yang2@whitespace ~/SpeechRecognition/ex2

% grep "average log prob" hmm-3/train\*log

hmm-3/train\_1.log:Reestimation complete - average log prob per frame = -7.725691e+01

hmm-3/train\_2.log:Reestimation complete - average log prob per frame = -7.652781e+01

hmm-3/train\_3.log:Reestimation complete - average log prob per frame = -7.589995e+01

yang2@whitespace ~/SpeechRecognition/ex2

% grep "average log prob" hmm-4/train\*log

hmm-4/train\_1.log:Reestimation complete - average log prob per frame = -7.579887e+01

hmm-4/train\_2.log:Reestimation complete - average log prob per frame = -7.499374e+01

hmm-4/train\_3.log:Reestimation complete - average log prob per frame = -7.453358e+01

yang2@whitespace ~/SpeechRecognition/ex2

% grep "average log prob" hmm-5/train\*log

hmm-5/train\_1.log:Reestimation complete - average log prob per frame = -7.450794e+01

hmm-5/train\_2.log:Reestimation complete - average log prob per frame = -7.374001e+01

hmm-5/train\_3.log:Reestimation complete - average log prob per frame = -7.335785e+01

yang2@whitespace ~/SpeechRecognition/ex2

% grep "average log prob" hmm-6/train\*log

hmm-6/train\_1.log:Reestimation complete - average log prob per frame = -7.341865e+01

hmm-6/train\_2.log:Reestimation complete - average log prob per frame = -7.266691e+01

hmm-6/train\_3.log:Reestimation complete - average log prob per frame = -7.231442e+01

Q3:

Female 11.11 313

Male 10.33 766

Combined 10.7