ID1	ID2	Ex3	Ex3-notes
26557124	**37063286**	85	1. HMM training: start symbol should be counted once for unigram count, and 0 times for token counts . 2. HMM Viterbi : implementation is too slow (over 10 minutes). 3. MEMM Viterbi: implmentation is too slow (over 5 houres). You should prune tags that were not seen during training.
38847588	**201547510**	100	--
39128871	**300995776**	85	1. HMM train: start symbol should be counted once for unigram count, and 0 times for token counts 2. HMM Viterbi: a. expected accuracy should be >95% b. you should apply pruning techniques (addressing only the relevent tags at each step). Your current implementation is too slow! 3. MEMM Viterbi: accuracy is too low. MEMM features: expected accutacy should be > 96%. Accurcy can be improved with better feature enginnering.
43023662	**200327914**	88	1. Most requent eval: need to set the type of the correct tags to float (your evaluation function allways returns 0). 2. Most frequent training: the training should return for each word its most frequent tag (there is no use of keeping all the tags). 3. HMM Viterbi: expected accuracy should be >95% 4. missing documentation of Most frequent, HMM and MEMM (only error Analysis included)
43362151	**304389463**	84	1. HMM Viterbi: takes about 3 minutes to evalueate the model 2. MEMM: You should prune all tags that were not seen for a word in training time (like you did in HMM). Current implmentation is way too slow (over 2 days). In addition, its possible to achieve better accuracy results with more feature enginnering, and still keep a descent run-time results.
200753341	**321031932**	100	--
200831618	**200954675**	100	--
200932648	**302868898**	75	1. HMM Viterbi: You should apply pruning techniques (addressing only the relevent tags at each step). Current implementation is too slow! MEMM Viterbi: Implemantation is too slow (see HMM notes) MEMM features: you didn't use your suffix list for feature extractions (instead you used the prefixes list twice by mistake). This might explain why you got low accuracy results (should be > 96%)
201325644	**203828496**	100	--
201327988			Submitted with 038775664
203056585	**204085948**	96	1. HMM VIterbi: evaluation takes a few minutes.
203711494	**312484769**	100	--

204336747	**302764956**	96	1. MEMM: Evaluation takes 4 houres
206335283	**304856529**	91	1. HMM training: start symbols should be counted once for uni-grams. MEMM: Evaluation takes ~5h, your implmentation is to slow. You frogot to apply your pruning techniqe (i.e addressing only the tags seen in training) in your most inner-loop.
300094836	**311156442**	88	HMM train: 1. start symbols should be counted once for uni-grams. 2. Unigram probability - the token count should include duplicates. HMM viterbi: 1. .Pruning policy is not optimal - evaluation takes a few minutes. A simpler pruning solution where S_k is defined to be the tags that where seen for the k'th word during training is more efficient
300461605	**203169271**	90	1. HMM viterbi: Pruning policy is inefficient- evaluation takes a few minutes. A simpler pruning solution where, S_k is defined to be the tags that where seen for the k'th word during training, is more efficient (evaluation takes only a few seconds). MEMM evaluation takes about 4h, can be done more efficiently.
300611878	**300360310**	82	1.HMM Viterbi: Evaluation takes about 10 minutes, can be more efficient. MEMM: run time - 41h, implementation is too slow . A simpler pruning solution, where S_k is defined to be the tags that where seen for the k'th word during training.
300668472	**304827702**	90	1. HMM training: start symbols shuld be counted only once for unigram MEMM features: feature engineering is very basic, the accuracy of the model can be improved with better features (for exmple- word's suffix and prefix).
300719002	**300427200**	94	HMM training: token counts should not include the start symbols. Unigram count should include only one start symbol per sentence.
300947454	**301747390**	90	1. HMM training : token counts should not include the start symbols, unigram count should only include one start symbol per sentence. 2. HMM Viterbi: Pruning policy is not optimal - evaluation takes a few minutes. A simpler pruning solution, where S_k is defined to be the tags that where seen for the k'th word during training is more efficient. MEMM : Evaluation takes 4.5h, can be improved with a better pruning policy (see note on HMM Viterbi).
301044657	**300464898**	94	1. HMM training: token counts should not includ the start symbols. Unigram count should include only one start symbol per sentence.
301221917	**300370129**	100	--
301803862	**201268018**	96	1. HMM training: Unigram count should include only one start symbol per sentence MEMM Viterbi: Evaluation takes 6h , the implementation can be more efficient.

301804191	**200375152**	88	1. HMM Viterbi: evalutation takes over 3 minutes. you needed to apply pruning techniqes to save time.
302026315	**323624437**	95	1. Most frequent: you evaluated the trained model against a model trained over the develoment set (instead the labels of the development set).
305616872	**308018571**	100	--
308059401	**302277041**	80	1. HMM training: start symbol should be counted once for unigram count, and 0 times for token counts . 2. HMM Viterbi : a. Evaluation takes a few minutes. b. Evaluation score is to low (should be > 95%). 3.MEMM Viterbi : a.Evaluation takes 20h, the implmentations is to too slow! pruning strategy is not optimal - note that most words have only 1-2 tags, there is no use of keeping 5 tags for each word. ,b. Evaluation score is to low (92% test accuracy, should be > 96%)
308134048	**302626684**	91	1. HMM training: start symbol should be counted once for unigram count, and 0 times for token counts 2. HMM Viterbi: Pruning policy is not optimal - evaluation takes a few minutes. A simpler pruning solution where S_k is defined to be the tags that where seen for the k'th word during training is more efficient.
308275965	**38354213**	85	HMM Training: start symbol should be counted once for unigram. HMM Viterbi: evaluation is too slow! need to apply pruning techniques.
300734530	**301635421**	100	--
38775664		90	1. HMMl training: start symbols should be counted once for unigram-count and 0-times for token counts. 2. HMM VIterbi: takes about 3 minutes (should take a few seconds).
205550940			
209194638			
203022983			
32509572			