

Natural Language Processing (viterbi task- 1) Report Given the gold-standard dependency graphs and the Oracle (set of heuristics/rules) below, We need to train a simple linear classifier to generate dependency graphs for unknown sentences. We will also have to report the UAS (Unlabelled Attachment Score) metric over the test set.

1. calculate_metrics:

- test (UAS metrics) Accuracy: 71.8457%
- weights saved in dependency_model_on.npy
- Predictions saved in dependency_predictions_on.tsv in format of (sent_id token number =i ith word ith pred_head_index)
- challenges

1. implementing transaction and oracle in wrong transaction it goes into loop (used try except and throw error to handle it)
 2. implement configuration vector
 3. generate training data (add config and transition to training data using deep copy of the object , shuffle the data when training for better learning parameter)
- Assumption
1. train.csv and test.csv is in same folder as the codes (.ipynb /.py) files
 2. we are not predicting root word in the sentence as it is mentioned in assignment (this assignment, we are interested in only predicting only the head word for each word (the dependency relation with the head word does not need to be predicted for inference).) as the root word don't have a head word.
 3. we will assume that missing word index is the root.