

NLP

Exercise 4

Samuel Hagege, 337970552

Andy Benichou 345233274

Question 1:

We reach 35% accuracy on the test set. The result can be improved by adding more features like the distance between the edge words, or if it's a right or left edge according to the words order and also other features on the neighbors of the words involved in the edge.

Question 2 :

1) The length of the sentence we use the arc standard transition system is 14 (2 - #words) because we have :

- 1- Shift
- 2- Shift
- 3- Left – arc Subj
- 4- Shift
- 5- Shift
- 6- Shift
- 7- Left arc mark
- 8- Right arc ad
- 9- Shift
- 10- Shift
- 11- Left arc cc
- 12- Right arc conj
- 13- Right arc obj
- 14- Right arc root

2) The length of the sentence we use the arc eager transition system is 11 (and then we received a shorter sentence than in the previous question) :

- 1- Shift
- 2- Left arc nsubj
- 3- Right arc root
- 4- Right arc obj
- 5- Shift
- 6- Left arc mark
- 7- Right arc ad
- 8- Reduce
- 9- Shift
- 10- Left arc cc
- 11- Right arc conj