

This time, after the detailed explanation of the teacher in the listening tut, everything became very easy. Following the five steps on the template, we were able to complete the assignment step by step. The first of these functions results in the probability that the first term is S/B. The second function gives us the transpose of the transition matrix (which helps a lot for the later calculation), and the third function gives us the result of the mission matrix, in which we need to use Laplace smoothing and store the final result in the four DICTs (also for the later calculation). The result of the fourth function is the predicted label of the test data, the result of the fifth function is the test split (stored in the txt file), and the final main function contains the code to calculate the F1-score.

**The precision is: 75.62%, The recall is: 76.41%, the f1 score is: 0.76013.**

The “my\_prediction.txt” is the result of 分词.

