# 实验一:语言模型

#### 实验目的:

理解并实践语言模型

### 实验内容:

- 1: 用 python 编程实践语言模型 (uni-gram 和 bi-gram),加入平滑技术。
- 2: 计算 test.txt 中句子的 PPL,对比 uni-gram 和 bi-gram 语言模型效果。

### 数据集:

train\_LM.txt test\_LM.txt

Example: (每行数据是一段对话,句子间用\_\_eou\_\_分隔)

How much can I change 100 dollars for ? \_\_eou\_\_ What kind of currency do you want ? \_\_eou\_\_ How much will it be in Chinese currency ? \_\_eou\_\_ That's 680 Yuan . eou

What kind of account do you prefer? Checking account or savings account? \_\_eou\_\_ I would like to open a checking account. \_\_eou\_\_ Ok, please just fill out this form and show us your ID card. \_\_eou\_\_ Here you are. \_\_eou\_\_

## 实验指导:

Python 教程:

https://www.liaoxuefeng.com/wiki/0014316089557264a6b348958f449949df42a6d3a2e542c000

python 以及 pycharm 安装:

http://www.runoob.com/w3cnote/pycharm-windows-install.html

分词工具:

nltk.tokenize.word tokenize