```
Lab. Installation of KoNLPy, Mecab on Ubuntu
 2
 3
 4
   1. JDK 설치
 5
     1)konlpy를 사용하기 위해서는 JDK 설치가 선행되어야 한다.
     2)jdk는 1.8 버전을 설치하겠다.
 6
 7
     3)Oracle Java를 설치해도 되고, OpenJDK를 설치해도 된다.
     4)여기서는 OpenJDK를 설치하겠다.
 8
 9
       $ sudo apt-get update
10
       $ sudo apt-get install openidk-8-jdk
11
12
     5)설치 후 Java version으로 test.
13
       $ java -version
       openjdk version "1.8.0_222"
14
15
       OpenJDK Runtime Environment (build 1.8.0_222-8u222-b10-1ubuntu1~18.04.1-b10)
       OpenJDK 64-Bit Server VM (build 25.222-b10, mixed mode)
16
17
18
19 2. KoNLPv 설치
20
     1)아래와 같이 konlpy와 ipype1-py3를 설치한다.
21
       $ sudo pip3 install konlpy
22
23
     2)설치가 완료되었다면 Python에서 konlpy 패키지를 사용할 수 있는지 확인한다.
24
       $ python3
25
       Python 3.7.4 (default, Sep 8 2019, 02:39:09)
26
       [GCC 7.4.0] on linux
       Type "help", "copyright", "credits" or "license" for more information.
27
28
       >>> from konlpy.tag import Komoran
       >>> komoran = Komoran()
29
       /usr/local/lib/python3.7/site-packages/jpype/_core.py:210: UserWarning:
30
31
32
       Deprecated: convertStrings was not specified when starting the JVM. The default
33
       behavior in JPype will be False starting in JPype 0.8. The recommended setting
       for new code is convertStrings=False. The legacy value of True was assumed for
34
       this session. If you are a user of an application that reported this warning,
35
36
       please file a ticket with the developer.
37
38
39
40
       >>> text = u"""아름답지만 다소 복잡하기도한 한국어는 전세계에서 13번째로 많이 사용되는 언어입니다."""
41
       >>> print(komoran.morphs(text))
       ['아름답', '지만', '다소', '복잡', '하', '기', '도', '하', 'ㄴ', '한국어', '는', '전', '세계', '에서', '13', '번', '째', '로', '많
42
       이', '사용', '되', '는', '언어', '이', 'ㅂ니다', '.']
43
44
       >>> exit()
45
46
47
   3. Mecab Downloads and Installation
48
     1)mecab 홈페이지에서 최신 버전을 download한다.
       https://bitbucket.org/eunjeon/mecab-ko/downloads/mecab-0.996-ko-0.9.2.tar.gz
49
50
51
     2)혹은 Downloads directory로 이동하여 wget으로 받는다.
52
       $ cd Downloads
       $ wget https://bitbucket.org/eunjeon/mecab-ko/downloads/mecab-0.996-ko-0.9.2.tar.gz
53
```

```
54
 55
      3)Installation
 56
        ~/Downloads$ tar xvfz mecab-0.996-ko-0.9.2.tar.gz
 57
        ~/Downloads$ cd mecab-0.996-ko-0.9.2
 58
        ~/Downloads/mecab-0.996-ko-0.9.2$ ./configure
 59
        ~/Downloads/mecab-0.996-ko-0.9.2$ make
 60
        ~/Downloads/mecab-0.996-ko-0.9.2$ make check
        ~/Downloads/mecab-0.996-ko-0.9.2$ sudo make install
 61
 62
 63
      4) version check
 64
        -version을 check하면 아래와 같은 오류가 발생한다.
 65
 66
          ~/Downloads/mecab-0.996-ko-0.9.2$ mecab --version
          mecab: error while loading shared libraries: libmecab.so.2: cannot open shared object file:
 67
          No such file or directory
 68
 69
        -그럼 library를 loading하고 다시 version check한다.
 70
 71
          ~/Downloads/mecab-0.996-ko-0.9.2$ sudo ldconfig
 72
          ~/Downloads/mecab-0.996-ko-0.9.2$ mecab --version
 73
          mecab of 0.996/ko-0.9.2
 74
 75
 76 4. Mecab 한국어 사전 Download and Installation
 77
      1)사전 홈페이지에서 최신 version을 download한다.
 78
 79
        https://bitbucket.org/eunjeon/mecab-ko-dic/downloads/mecab-ko-dic-2.1.1-20180720.tar.gz
 80
 81
      2)또는 위와 같이 wget으로 Download해도 된다.
 82
 83
        ~/Downloads$ wget
        https://bitbucket.org/eunjeon/mecab-ko-dic/downloads/mecab-ko-dic-2.1.1-20180720.tar.gz
 84
 85
      3)Installation
 86
 87
        ~/Downloads$ tar xvfz mecab-ko-dic-2.1.1-20180720.tar.gz
        ~/Downloads$ cd mecab-ko-dic-2.1.1-20180720
 88
 89
        ~/Downloads/mecab-ko-dic-2.1.1-20180720$ ./configure
 90
        ~/Downloads/mecab-ko-dic-2.1.1-20180720$ make
 91
        ~/Downloads/mecab-ko-dic-2.1.1-20180720$ sudo make install
 92
 93
      4)설치가 잘 됐는지 directory를 확인하도록 한다.
 94
 95
        $ mecab -d /usr/local/lib/mecab/dic/mecab-ko-dic
        오늘은 날씨가 매우 좋습니다. 태풍이 물러간 후여서 그런 것 같습니다
 96
             NR,*,F,오,*,*,*
 97
        오
 98
        날씨
             NNG,*,F,날씨,*,*,*,*
 99
        가
             JKS,*,F,가,*,*,*,*
        매우
              MAG,성분부사 정도부사, F, 매우, *, *, *, *
100
             VA,*,T,\,\,\*,\*,\*,
101
        습니다 EF,*,F,습니다,*,*,*,*
102
             SF,*,*,*,*,*,*
103
             NNG,*,T,태풍,*,*,*
104
        태풍
             JKS,*,F,0|,*,*,*,*
105
        0
```

```
물러간 VV+ETM,*,T,물러간,Inflect,VV,ETM,물러가/VV/*+_/ETM/*
106
107
              NNG,*,F,후,*,*,*,*
         여서
              VCP+EC,*,F,여서,Inflect,VCP,EC,이/VCP/*+어서/EC/*
108
              MM,~명사,T,그런,*,*,*
109
         그런
              NNB,*,T,것,*,*,*,*
110
         같
              VA,*,T,같,*,*,*
111
         습니다 EF,*,F,습니다,*,*,*,*
112
113
         EOS
114
115
       5)이번에는 python 코드에서 테스트해본다.
116
117
         $ python3
118
         Python 3.7.4 (default, Sep 8 2019, 02:39:09)
119
         [GCC 7.4.0] on linux
        Type "help", "copyright", "credits" or "license" for more information.
120
121
122
         >>> from konlpy.tag import Mecab
123
         >>> mecab = Mecab()
124
        Traceback (most recent call last):
          File "/usr/local/lib/python3.7/site-packages/konlpy/tag/_mecab.py", line 107, in __init__
125
           self.tagger = Tagger('-d %s' % dicpath)
126
127
         NameError: name 'Tagger' is not defined
128
129
         During handling of the above exception, another exception occurred:
130
131
        Traceback (most recent call last):
132
          File "<stdin>", line 1, in <module>
133
          File "/usr/local/lib/python3.7/site-packages/konlpy/tag/ mecab.py", line 112, in init
134
           raise Exception('Install MeCab in order to use it: http://konlpy.org/en/latest/install/')
         Exception: Install MeCab in order to use it: http://konlpy.org/en/latest/install/
135
136
137
       6)KoNLPy에서 Mecab 오류
         -위에 나온대로, KoNLPy에서 Mecab을 쓰려는데 오류가 난다.
138
        -일단 konlpy 공식문서대로 아래의 명령을 실행한다.
139
140
141
           $ sudo apt install curl
           $ sudo apt install git
142
143
           $ bash <(curl -s
           https://raw.githubusercontent.com/konlpy/konlpy/master/scripts/mecab.sh)
144
145
146
           mecab-ko is already installed
           mecab-ko-dic is already installed
147
           Install mecab-python
148
           /tmp ~
149
150
           Cloning into 'mecab-python-0.996'...
151
           remote: Counting objects: 17, done.
152
           remote: Compressing objects: 100% (16/16), done.
           remote: Total 17 (delta 3), reused 0 (delta 0)
153
154
           Unpacking objects: 100% (17/17), done.
155
156
           Processing /tmp/mecab-python-0.996
157
           Building wheels for collected packages: mecab-python
            Running setup.py bdist_wheel for mecab-python ... done
158
```

```
159
            Stored in directory:
            /home/instructor/.cache/pip/wheels/99/75/a6/e9e73a1dbd73579383644942ef18a6d17ad7
            28a3052a1147fb
           Successfully built mecab-python
160
           Installing collected packages: mecab-python
161
           Successfully installed mecab-python-0.996-ko-0.9.2
162
163
           Done.
164
165
166
       7)이번에는 python 코드에서 테스트해본다.
167
168
         $ python3
169
         Python 3.7.4 (default, Sep 8 2019, 02:39:09)
170
         [GCC 7.4.0] on linux
         Type "help", "copyright", "credits" or "license" for more information.
171
172
173
         >>> from konlpy.tag import Mecab
174
         >>> mecab = Mecab()
175
         Traceback (most recent call last):
          File "/usr/local/lib/python3.7/site-packages/konlpy/tag/_mecab.py", line 107, in __init__
176
           self.tagger = Tagger('-d %s' % dicpath)
177
178
         NameError: name 'Tagger' is not defined
179
180
         During handling of the above exception, another exception occurred:
181
182
         Traceback (most recent call last):
183
          File "<stdin>", line 1, in <module>
184
          File "/usr/local/lib/python3.7/site-packages/konlpy/tag/ mecab.py", line 112, in init
           raise Exception('Install MeCab in order to use it: http://konlpy.org/en/latest/install/')
185
         Exception: Install MeCab in order to use it: http://konlpy.org/en/latest/install/
186
187
188
         -같은 error가 발생한다.
         -이 문제는 libmecab.so.2 link를 생성하면 해결된다.
189
190
191
           $ cd Download/mecab-ko-dic-2.1.1-20180720
192
           ~/Downloads/mecab-ko-dic-2.1.1-20180720$ sudo Idconfig
193
           ~/Downloads/mecab-ko-dic-2.1.1-20180720$ Idconfig -p | grep /usr/local/lib
              libmecab.so.2 (libc6,x86-64) => /usr/local/lib/libmecab.so.2
194
              libmecab.so (libc6,x86-64) => /usr/local/lib/libmecab.so
195
196
197
         -다음과 같은 작업을 실행한다.
198
199
           $ cd Downloads
200
           ~/Downloads$ git clone https://bitbucket.org/eunjeon/mecab-python-0.996.git
           ~/Downloads$ cd mecab-python-0.996/
201
           mecab-python-0.996$ python3 setup.py build
202
203
           mecab-python-0.996$ sudo python3 setup.py install
204
205
         -test 해보자.
206
           $ python3
207
           Python 3.7.4 (default, Sep 8 2019, 02:39:09)
           [GCC 7.4.0] on linux
208
209
           Type "help", "copyright", "credits" or "license" for more information.
210
```

Lab. Installation of KoNLPy, Mecab on Ubuntu.txt

```
211
          >>> from konlpy.tag import Mecab
212
          >>> mecab = Mecab()
213
          >>> text = u"""오늘은 날씨가 매우 좋습니다. 태풍이 물러간 후여서 그런것 같습니다"""
214
          >>> mecab.morphs(text)
215
          ['오늘', '은', '날씨', '가', '매우', '좋', '습니다', '.', '태풍', '이', '물러간', '후', '여서', '그런', '것', '같', '습니다']
216
217
218 5. Anaconda에 KoNLPy와 Mecab 설치하기
      1)현재 python3에만 설치되어 있고 Anaconda에는 설치되어 있지 않다.
219
220
      2)Anaconda3에 konlpy를 설치한다.
221
222
        $ cd anaconda3/bin
223
        $ ~/anaconda3/bin$ ./pip install konlpy
224
        $ ~/anaconda3/bin$ ./pip list
225
226
                       0.5.1
        konlpy
227
228
      3)Jupyter Notebook에서 또는 ipython에서 테스트한다.
229
      4)하지만, 아직 Mecab은 위에서 본 error가 똑같이 발생한다.
230
      5)그 이유는 위에서 해결한 것은 python3에 대한 mecab설정이었고, 아직 Anaconda는 mecab 설정이 안되어 있기 때
231
      6) 그래서 Anaconda에도 똑같이 해야 한다.
      7)다음과 같은 작업을 실행한다.
232
233
234
        $ cd Downloads
235
        ~/Downloads$ cd mecab-python-0.996/
        mecab-python-0.996$ ~/anaconda3/bin/python3.7 setup.py build
236
237
        mecab-python-0.996$ sudo ~/anaconda3/bin/python3.7 setup.py install
238
239
      8)테스트
240
        -$ anaconda3/bin/python3.7에서 테스트
241
        -jupyter notebook에서도 테스트 할 것
```