MapReduce-WordCount (1)

July 16, 2025

```
[1]: from functools import reduce
     import string
[2]: translator = str.maketrans('', '', string.punctuation)
[9]: 'test!*'.translate(translator)
[9]: 'test'
[3]: words_lst = open('shakespeare.txt')\
                      .read()\
                      .split()
[5]: words_lst
[5]: ['This',
      'is',
      'the',
      '100th',
      'Etext',
      'file',
      'presented',
      'by',
      'Project',
      'Gutenberg,',
      'and',
      'is',
      'presented',
      'in',
      'cooperation',
      'with',
      'World',
      'Library,',
      'Inc.,',
      'from',
      'their',
      'Library',
```

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'of',
'the',
'Future',
'and',
'Shakespeare',
'CDROMS.',
'Project',
'Gutenberg',
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'BY',
'WORLD',
'LIBRARY,',
'INC.,',
'AND',
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'BENEDICTINE',
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'WITH',
'PERMISSION.',
'ELECTRONIC',
'AND',
'MACHINE',
'READABLE',
'COPIES',
'MAY',
'BE',
'DISTRIBUTED',
'SO',
'LONG',
'AS',
'SUCH',
'COPIES',
'(1)',
'ARE',
'FOR',
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'OR',
'OTHERS',
'PERSONAL',
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'(2)',
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'TO',
'GIVE',
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'our',
'Michael',
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'Executive',
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'hart@vmd.cso.uiuc.edu',
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'(bitnet)',
'We',
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'prefer',
'to',
'send',
'you',
'this',
'information',
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'(Internet,',
'Bitnet,',
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'zip',
'files]',
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'of',
'books',
'and',
'GET',
'NEW',
'GUT',
'for',
'general',
'information',
'and',
'MGET',
'GUT*',
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'the',
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'OF',
'ILLINOIS',
'BENEDICTINE',
'COLLEGE',
'WITH',
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'and',
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'the',
'materials',
'and',
'methods',
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'effect',
'the',
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'right',
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'is',
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'by',
'the',
'copyright',
'and',
'other',
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'by',
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'this',
'"Small',
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'1.',
'LICENSE',
'A)',
'YOU',
'MAY',
'(AND',
'ARE',
'ENCOURAGED)',
```

```
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'AND',
'MACHINE',
'READABLE',
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'ETEXT,',
'SO',
'LONG',
'AS',
'SUCH',
'COPIES',
'(1)',
'ARE',
'FOR',
'YOUR',
'OR',
'OTHERS',
'PERSONAL',
'USE',
'ONLY,',
'AND',
'(2)',
'ARE',
'NOT',
'DISTRIBUTED',
'OR',
'USED',
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'PROHIBITED',
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'FOR',
'DOWNLOAD',
'TIME',
'OR',
'FOR',
'MEMBERSHIP.',
```

```
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'the',
'conditions',
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'"small',
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'statement;',
'and',
'that',
'you',
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'copies',
'of',
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'including',
'this',
'Small',
'Print',
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'form',
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```
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      'hypertext',
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      'as',
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      '(1)',
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      'when',
      'displayed,',
      'is',
      'clearly',
      'readable,',
      'and',
      'does',
      '*not*',
      'contain',
      'characters',
      'other',
      'than',
      'those',
      'intended',
      'by',
      'the',
      'author',
      'of',
      'the',
      'work,',
      'although',
      'tilde',
      '(~),',
      'asterisk',
      ...]
[4]: unified_lst = list(map(lambda word: word.translate(translator))
                                               .lower()\
                                               , words_lst))
     #def cleanse(word):
          word = word.translate(translator)
```

'resulting',

```
# word = word.lower()
# return word
```

[7]: unified_lst

```
[7]: ['this',
      'is',
      'the',
      '100th',
      'etext',
      'file',
      'presented',
      'by',
      'project',
      'gutenberg',
      'and',
      'is',
      'presented',
      'in',
      'cooperation',
      'with',
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      'inc',
      'from',
      'their',
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      'of',
      'the',
      'future',
      'and',
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      'not',
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      'in',
      'the',
      'public',
      'domain',
      'shakespeare',
```

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'of',
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'shakespeare',
'is',
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'be',
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'or',
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'to',
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'with',
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'world',
'library',
```

```
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of',
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'complete',
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'the',
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'conditions',
'of',
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'presentation',
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'charges',
'may',
'be',
'made',
'for',
'any',
'access',
'to',
```

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'is',
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'of',
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```
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'at',
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'email',
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```
'juliancnetcomcom',
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'for',
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'official',
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          return i
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