

CSC108H Lecture 20

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Example 1: List Occurrences

```
def count_occurrences(L):  
    '''(list of object) -> dict of {object:int}  
    return a dictionary in which the keys are  
    the elements in L and their associated values  
    are integers denoting the number of times the element is  
    contained in L.  
  
    >>> count_occurrences([8, 9, 8, 8, 9])  
    {8:3, 9:2}  
    '''
```

ConcepTest

What is the dictionary that should be created for the text:
this is this was

- ▶ A. `{'': 'this', 'this': 'is', 'is': 'this', 'this': 'was'}`
- ▶ B. `{'': ['this'], 'this': ['is', 'was'], 'is': ['this']}`
- ▶ C. `{'': ['this'], 'this': ['is', 'was'], 'is': ['was']}`
- ▶ D. `{'': 'this', 'this': 'is', 'is': 'this'}`

ConceptTest

What is the dictionary that should be created for the text:
this is was this

- ▶ A. `{'': 'this', 'this': 'is', 'is': 'was', 'was': 'this'}`
- ▶ B. `{'': ['this'], 'this': ['is', 'was'], 'is': ['was']}`
- ▶ C.

```
{'': ['this'], 'this': ['is'], 'is': ['was'],  
  'was': ['this']}
```

- ▶ D. `{'': ['this'], 'is': ['was'], 'was': ['this']}`

Version 1

`make_dictionary:`

- ▶ The context will be the previous word (starts as '')
- ▶ Associate each context with its list of words
- ▶ The context becomes the current word

Version 1...

`mimic_text:`

- ▶ Takes dict and number of words to generate
- ▶ Again context starts off as ' '
- ▶ Look up the context in the dict; for now assume that the context is a key
- ▶ Randomly choose from the context's value list
- ▶ Append the chosen word to your story
- ▶ The context becomes the chosen word