

Generating Random Text

Implementing Order-Two

From MarkovOne to MarkovTwo

- MarkovOne `getRandomtext` calls `getFollows` method

```
for(int k=0; k < numChars-1; k++){  
    ArrayList<String> follows = getFollows(key);  
    if (follows.size() == 0){  
        break;  
    }  
    index = myRandom.nextInt(follows.size());  
    String next = follows.get(index);  
    sb.append(next);  
    key = next;  
}
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From MarkovOne to MarkovTwo

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 - Exit or add random follow to String

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From MarkovOne to MarkovTwo

- MarkovOne `getRandomtext` calls `getFollows` method
 - Exit or add random follow to String
 - Repeat with random String as next key

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for(int k=0; k < numChars-1; k++){  
    ArrayList<String> follows = getFollows(key);  
    if (follows.size() == 0){  
        break;  
    }  
    index = myRandom.nextInt(follows.size());  
    String next = follows.get(index);  
    sb.append(next);  
    key = next;  
}
```

Details of getRandomText

- MarkovOne `getRandomText` code

```
public String getRandomText(int numChars){
    StringBuffer sb = new StringBuffer();
    int index = myRandom.nextInt(myText.length()-1);
    String key = myText.substring(index, index+1);
    sb.append(key);

    for(int k=0; k < numChars-1; k++){
        // loop not shown
    }
    return sb.toString();
}
```


Details of getRandomText

- MarkovOne `getRandomText` code
 - **key** is one-character String

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    StringBuffer sb = new StringBuffer();
    int index = myRandom.nextInt(myText.length()-1);
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    sb.append(key);

    for(int k=0; k < numChars-1; k++){
        // loop not shown
    }
    return sb.toString();
}
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Details of getRandomText

- MarkovOne `getRandomText` code
 - **key** is one-character String
 - Think about changes to two-character

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    int index = myRandom.nextInt(myText.length()-1);
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