

NLP ASSIGNMENT 4 - Implement and train a part-of-speech tagger using the Viterbi algorithm

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Methods Used:

Additional methods used to improve accuracy -> Handled unknown words.

Id	Method Used	Validation_Set_Accuracy	Improvement %
1	HMM_Viterbi (Baseline with Most Probable PoS)	91.34 %	-
2	HMM_Viterbi (Baseline with Overall PoS Distribution)	94.51 %	+ 3.17%
3	HMM_Viterbi (Baseline with Hapax legomena open word classes)	94.88 %	+ 3.54%

References:

I used the techniques mentioned in this paper:

<http://cl.lingfil.uu.se/~nivre/statmet/haulrich.pdf>

Screenshots:

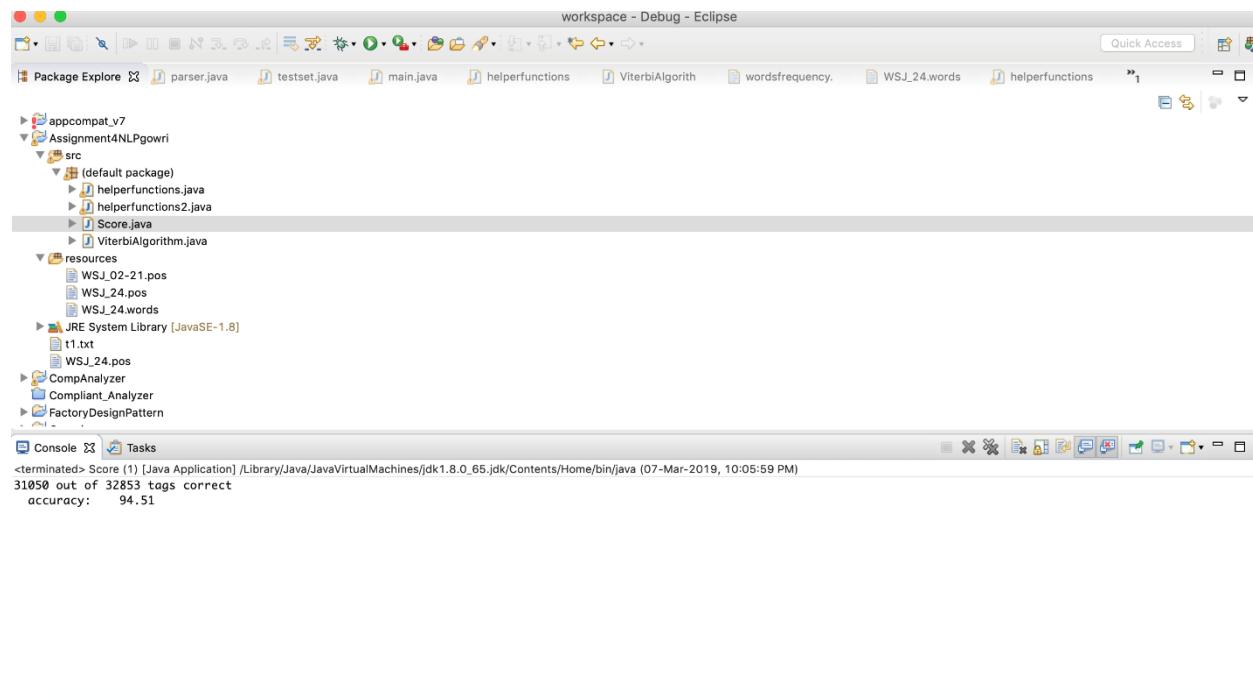
1.



The screenshot shows a Java application window with a title bar 'Console' and a 'Tasks' tab. The main area displays command-line output:

```
<terminated> Score (1) [Java Application] /Library/Java/JavaVirtualMachines/jdk1.8.0_65.jdk/Contents/Home/bin/java (07-Mar-2019, 11:39:24 PM)
30007 out of 32853 tags correct
accuracy: 91.34
```

2.



3.

