데이터사이언스

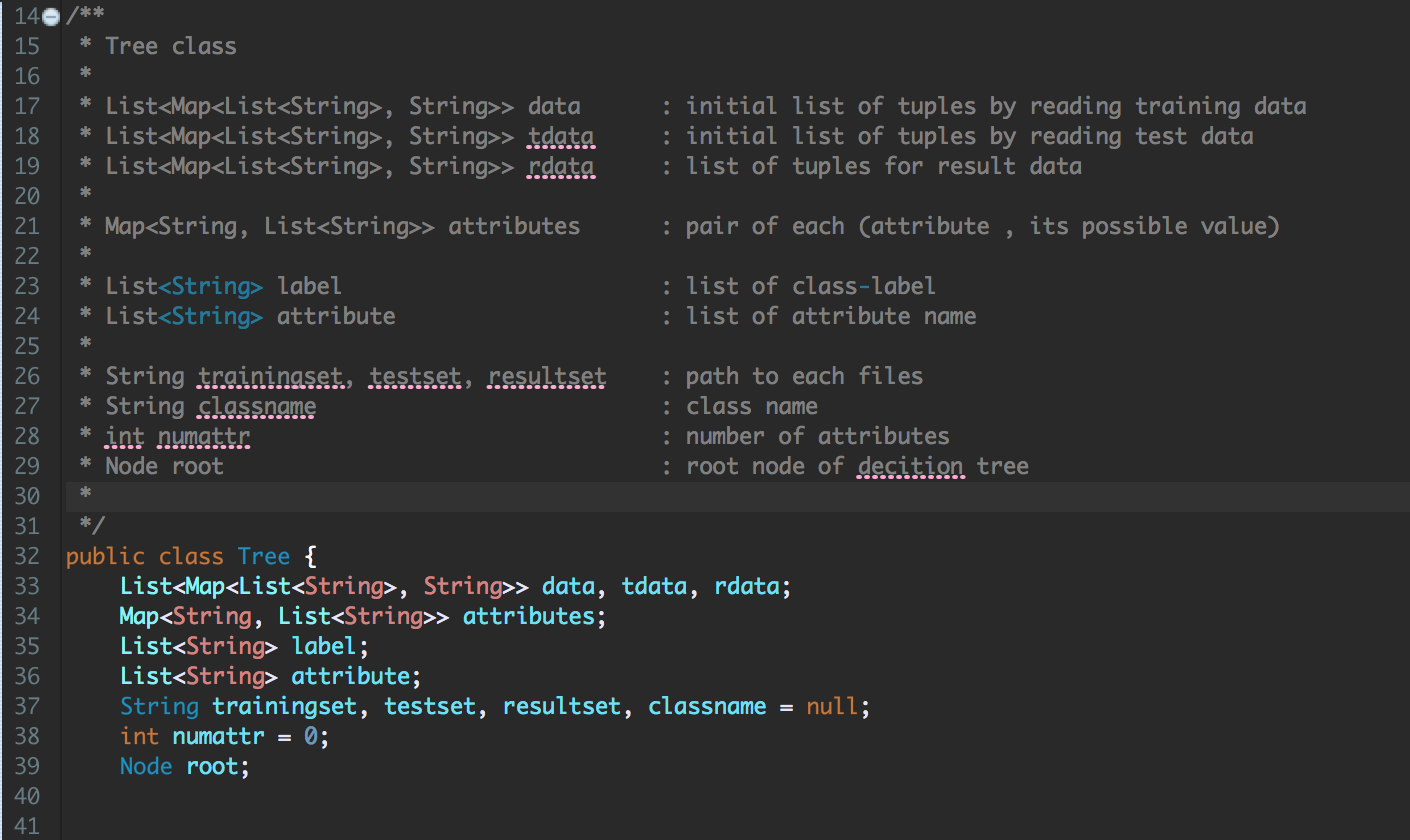
**Decision Tree implement assignment**

**2013011800** 구장회

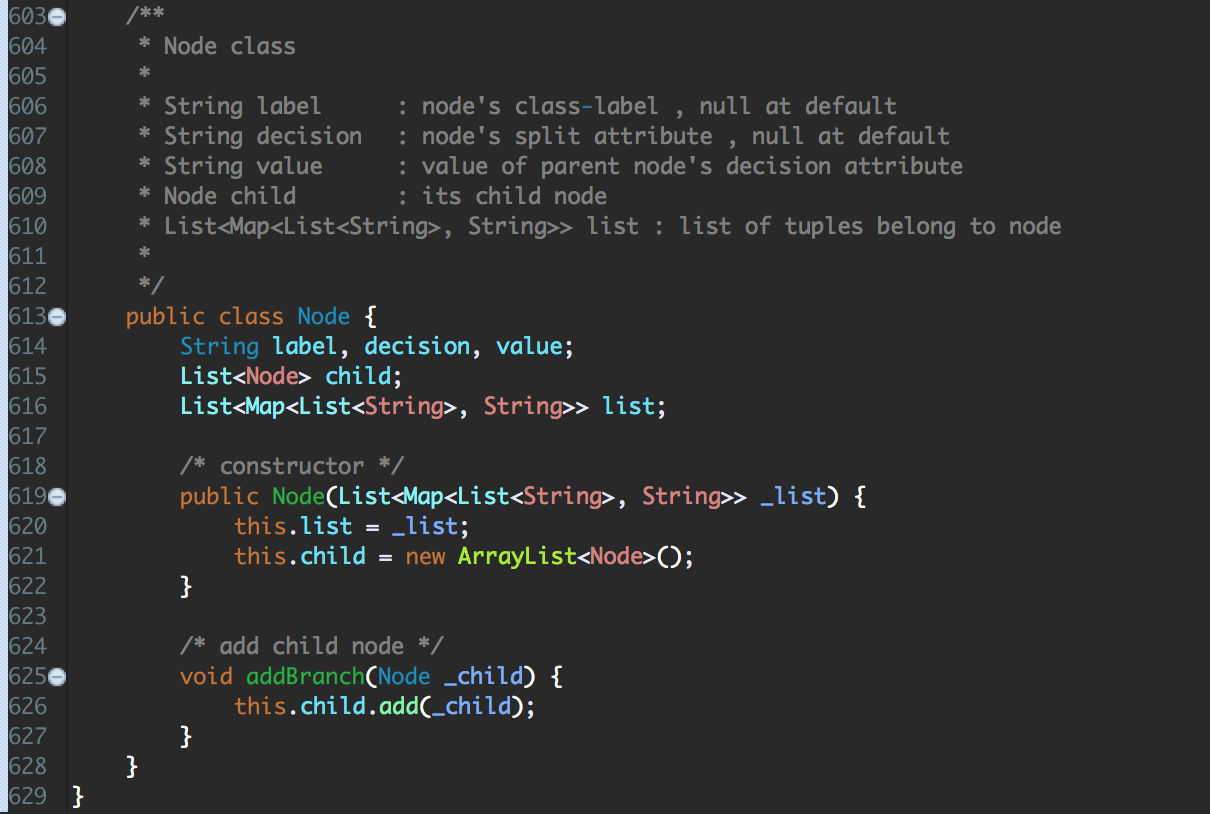
**#** 순서

1. **data structure - tree class , node class**
2. **summary of algorithm for crucial method**
3. **summary of rest algorithm**
4. **instruction for compile**

**# data structure**

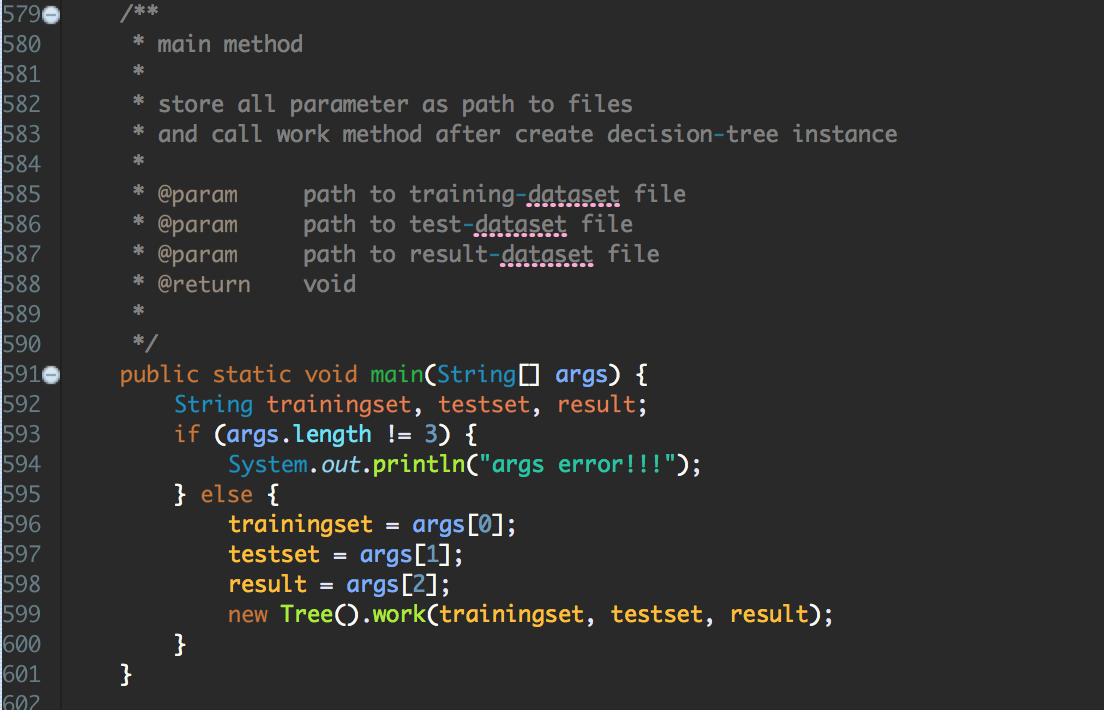
**[tree class]**

**[node class]**

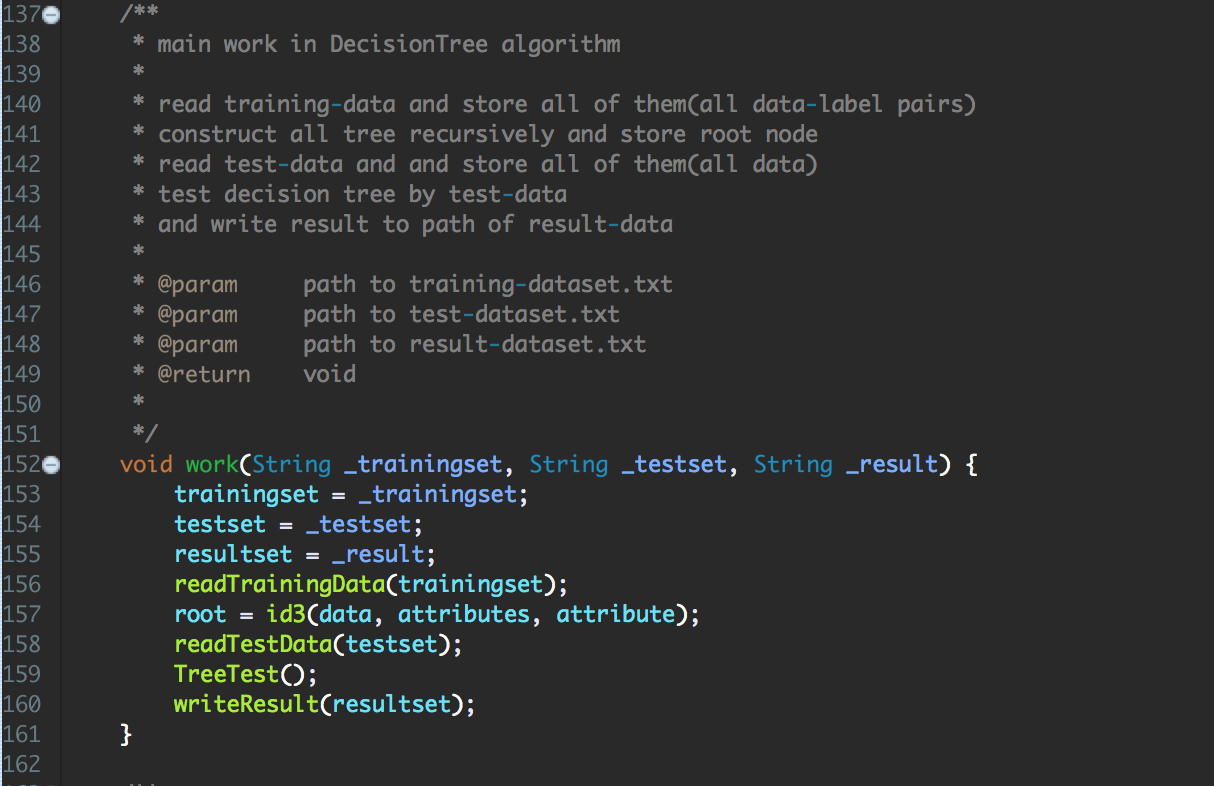


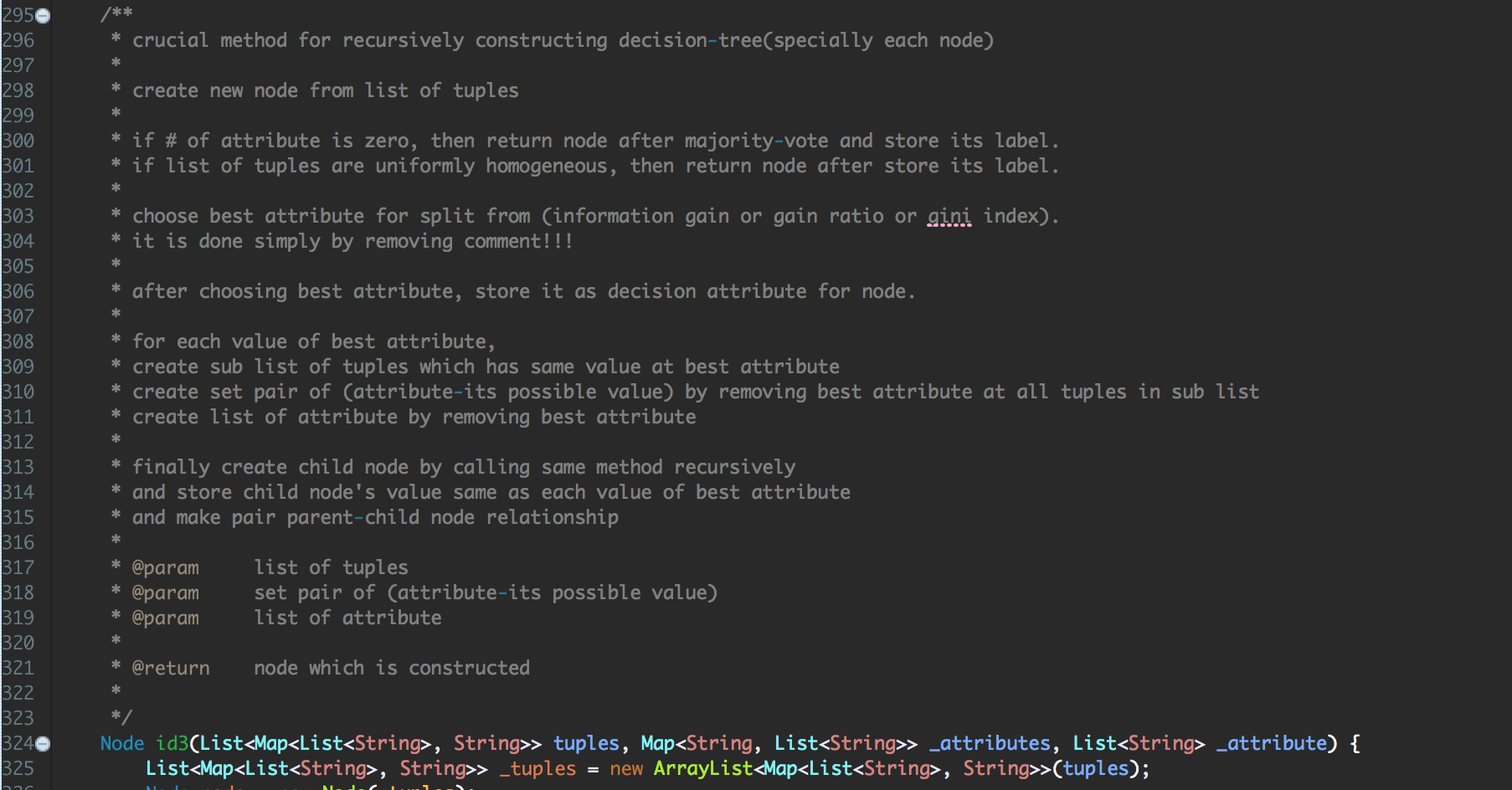
**# summary of algorithm for crucial method**

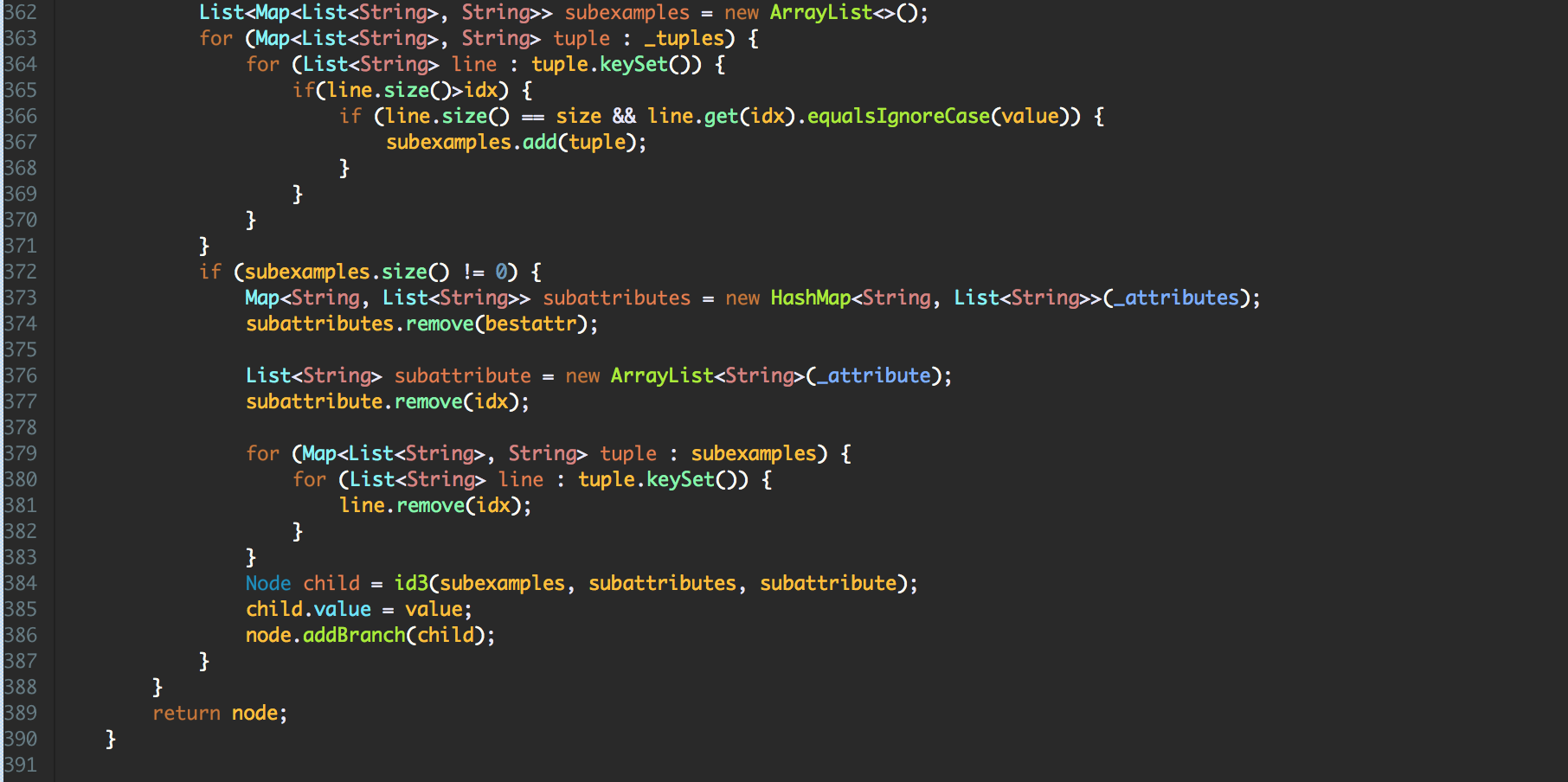
**[main method]**

****

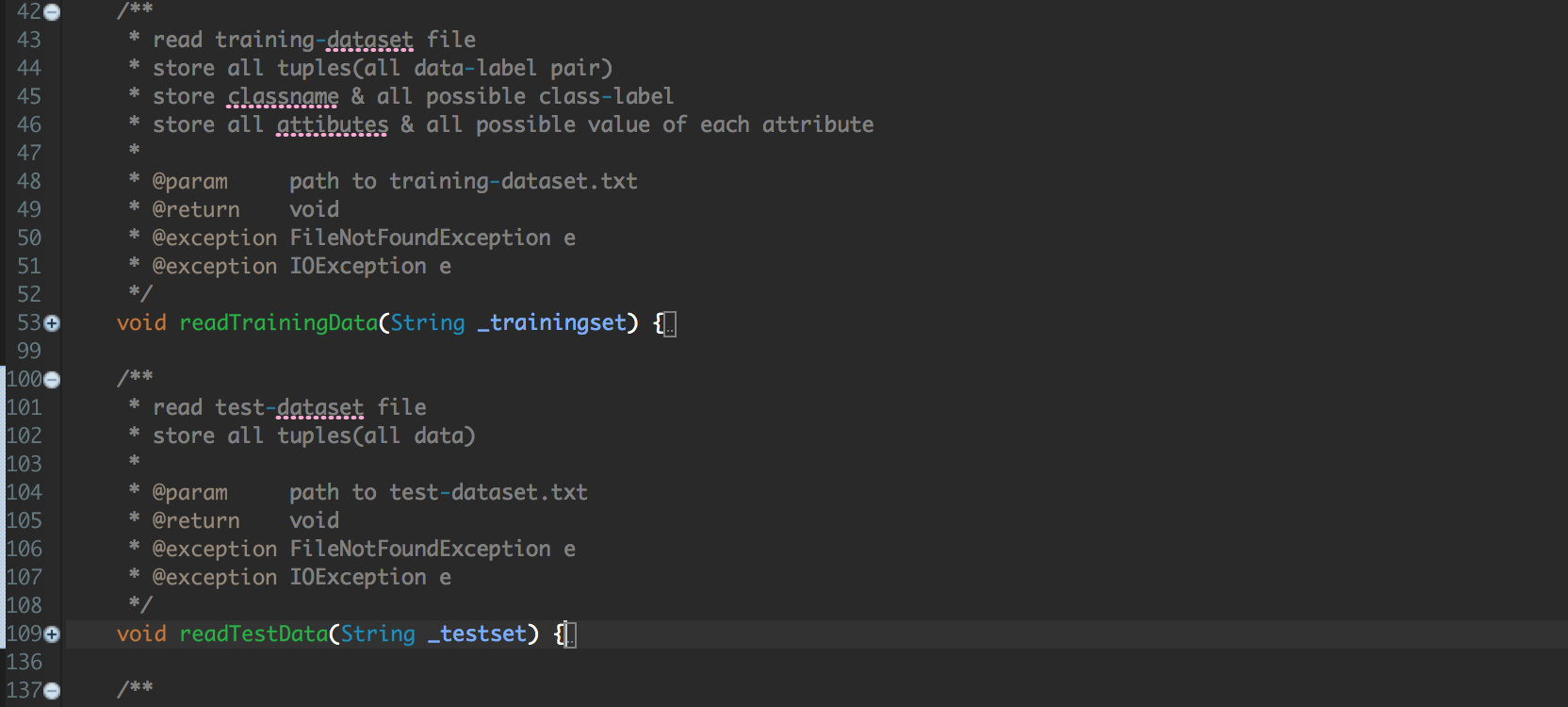
**[work() in tree class]**

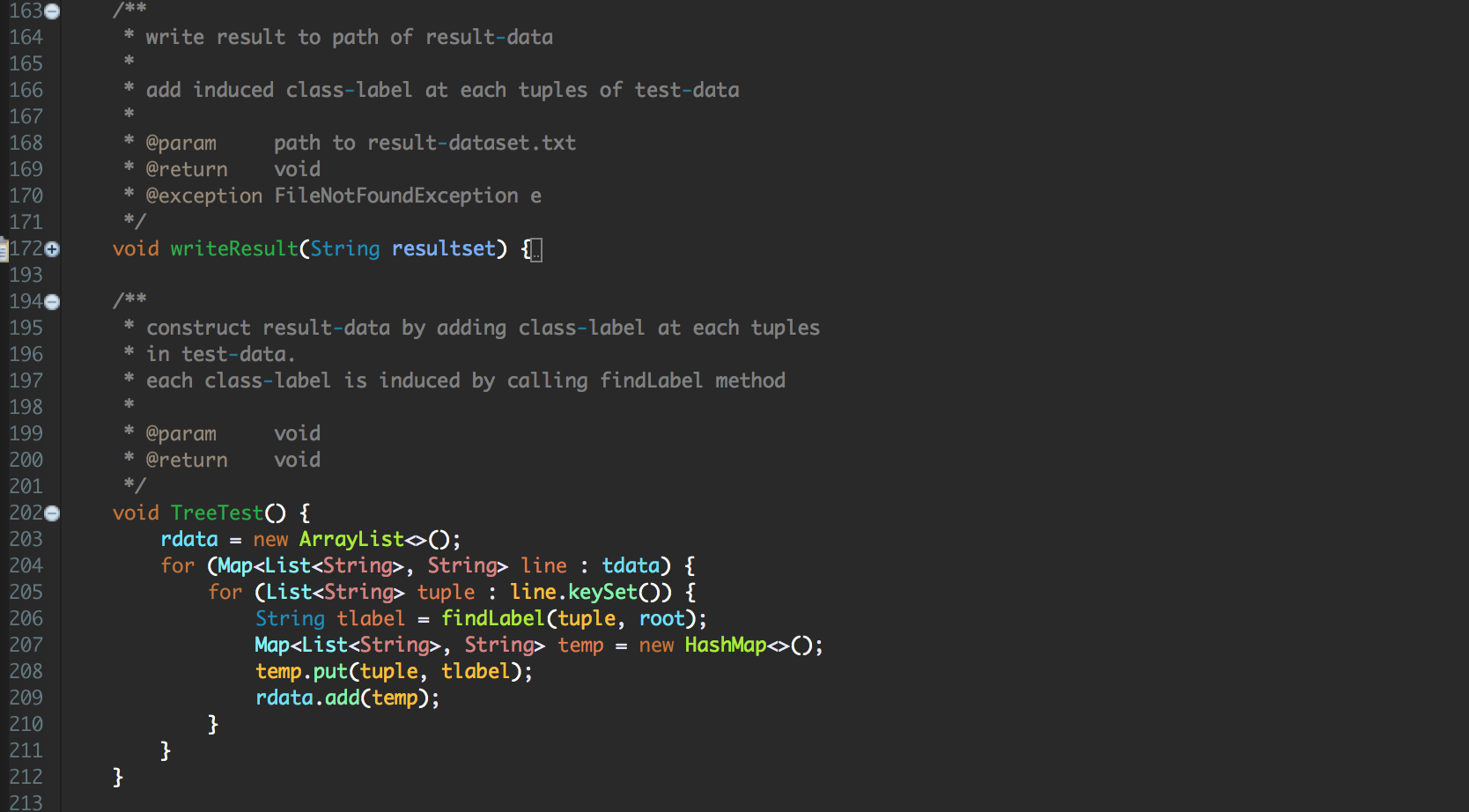
* **read training data**
* **construct decision tree**
* **read test data**
* **tree test from test data**
* **write result data**

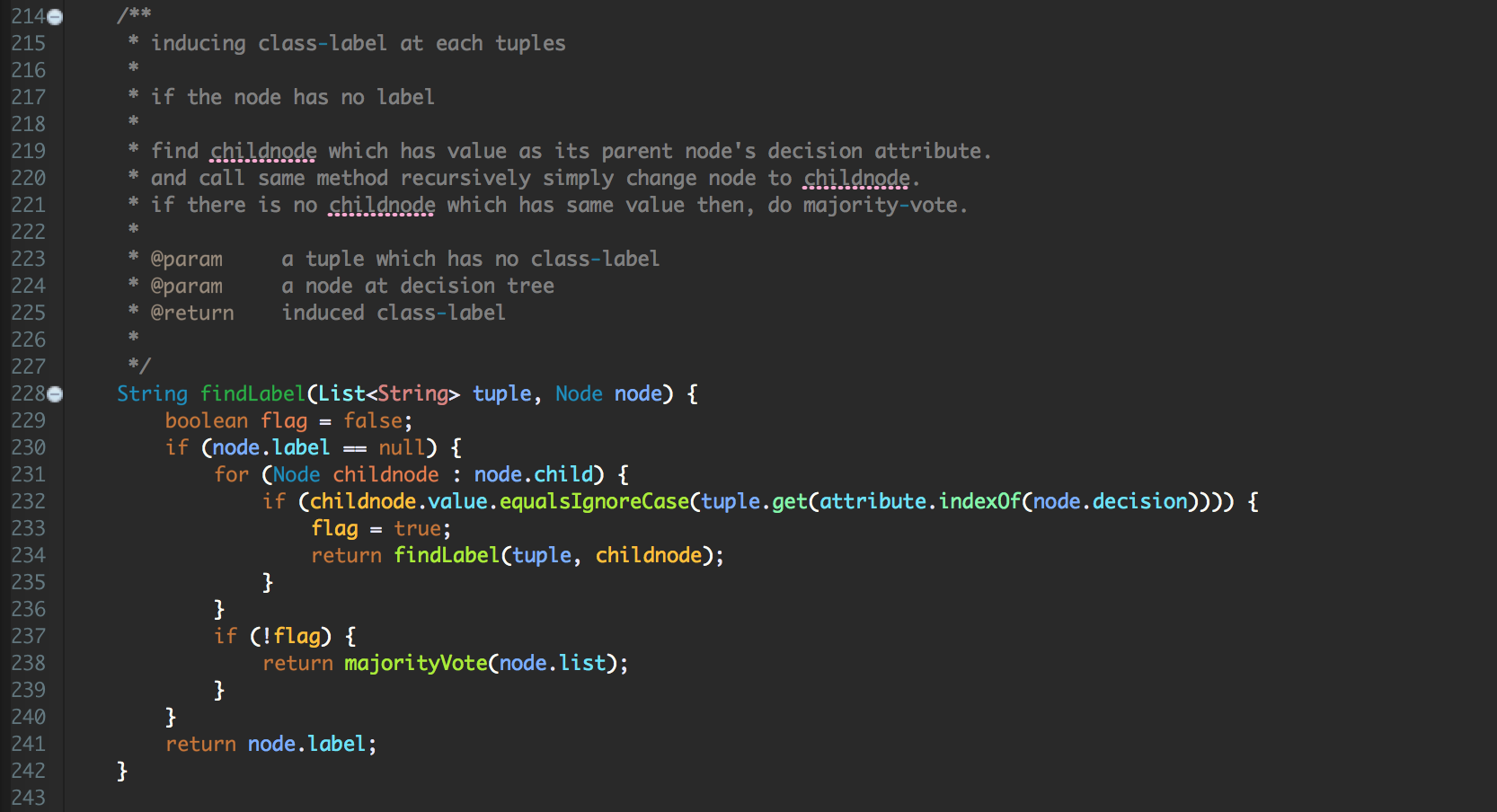
**[id3() in tree class]**

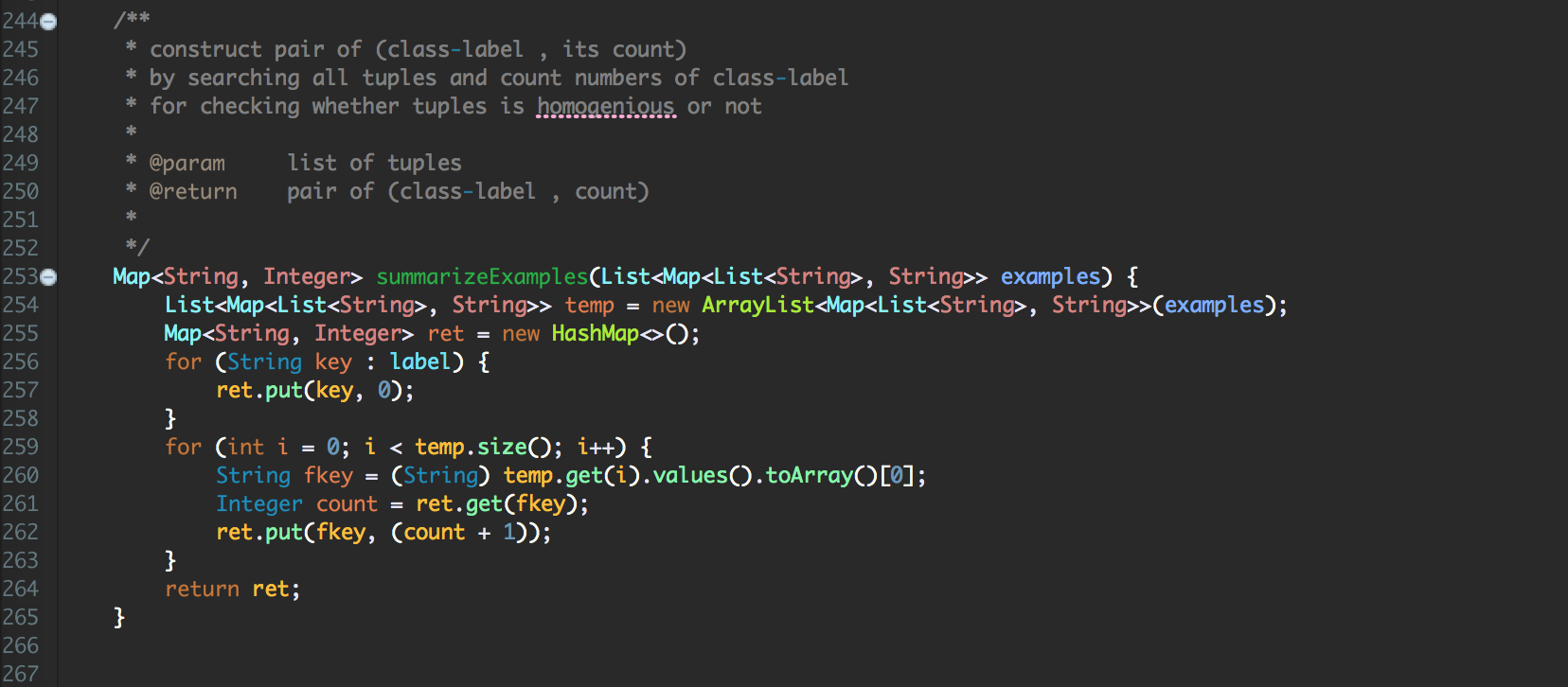
****

**# summary of rest algorithm**

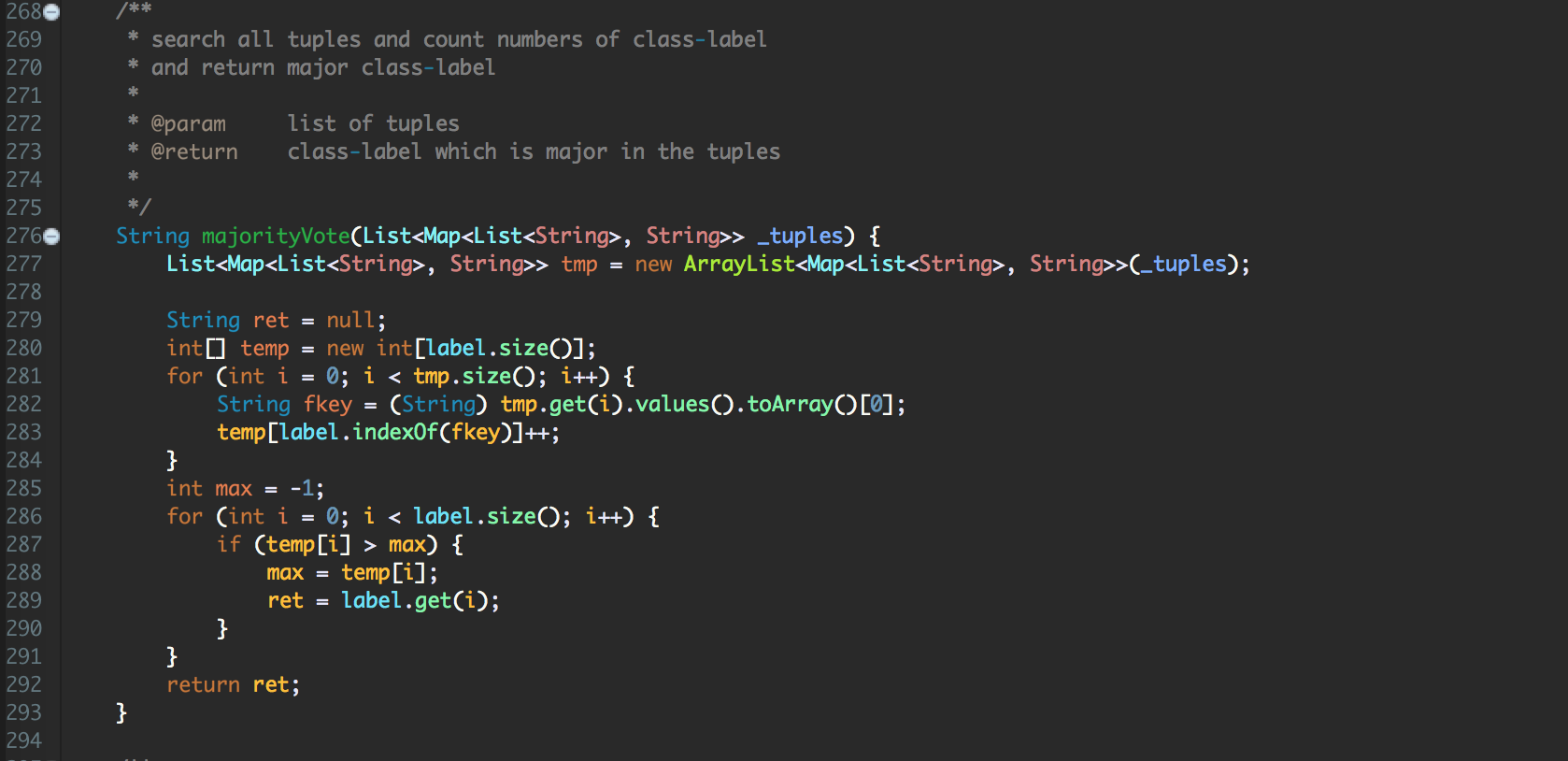
**[readTrainingData & readTestData]**

**[writeResult & TreeTest]**

**[findLabel]**

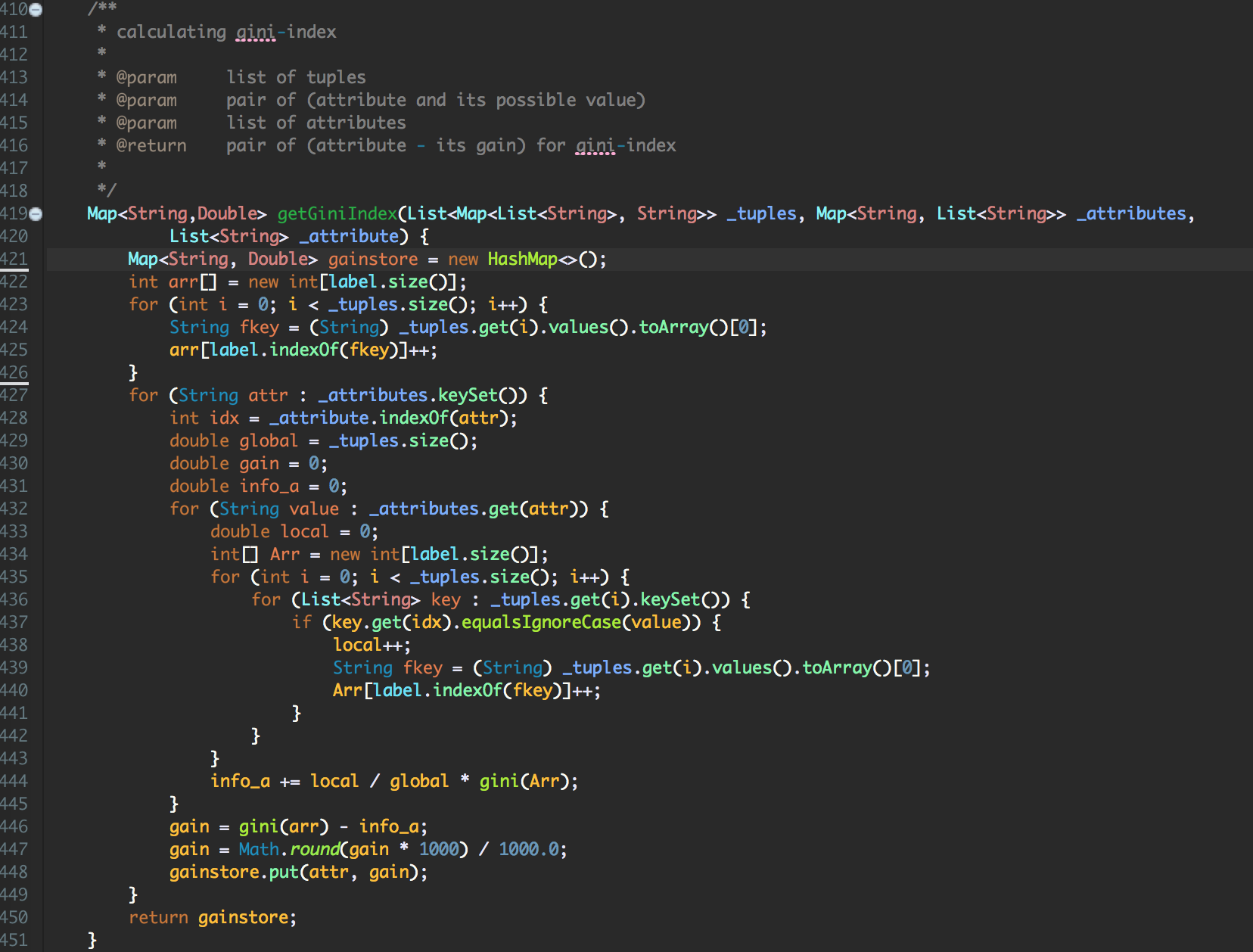
**[summarizeExamples]**

**[majority-vote]**



**[getBestAttr]**

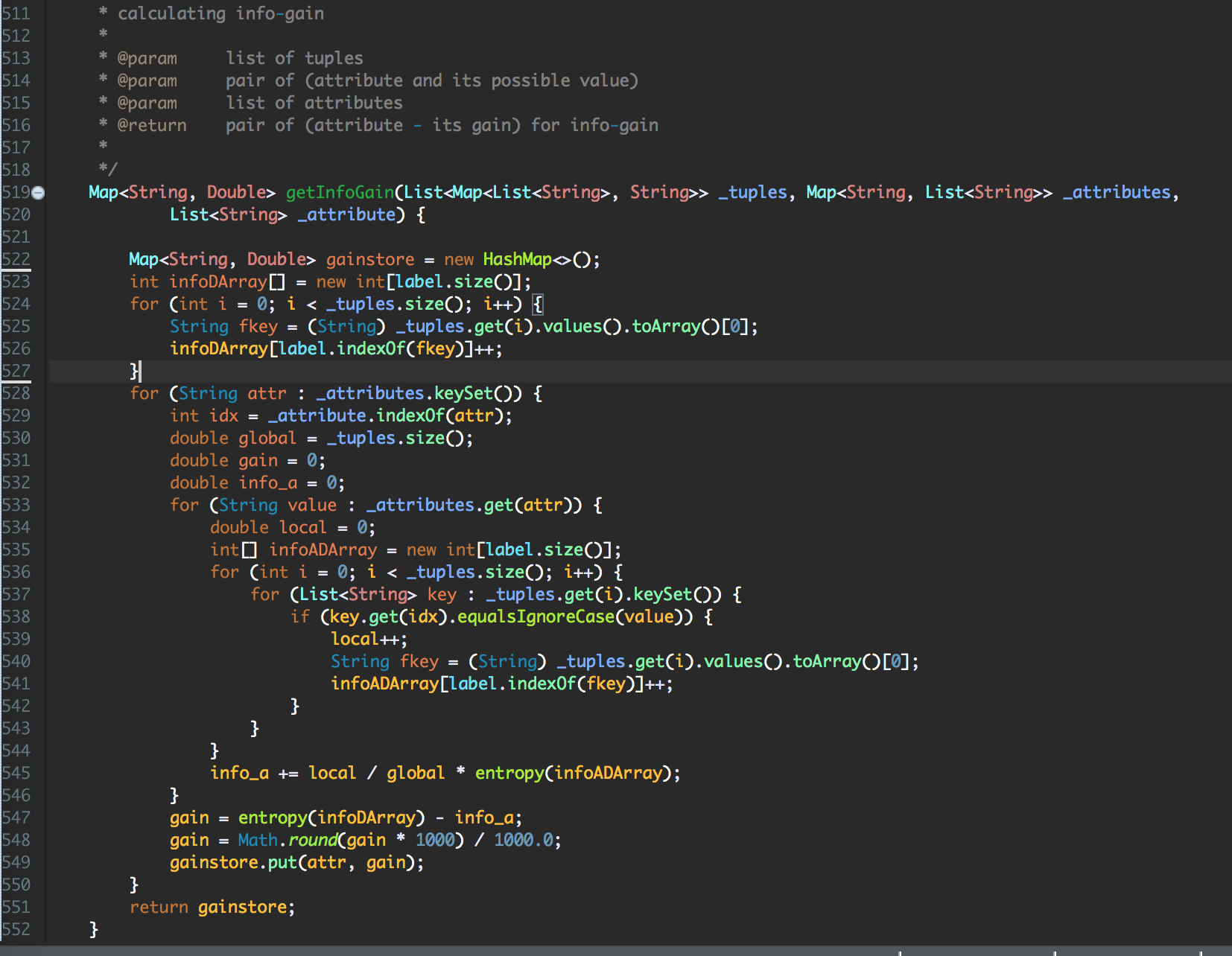


**[getGiniIndex]**

**[gini]**

**[getGainRatio]**

**[getInfoGain]**



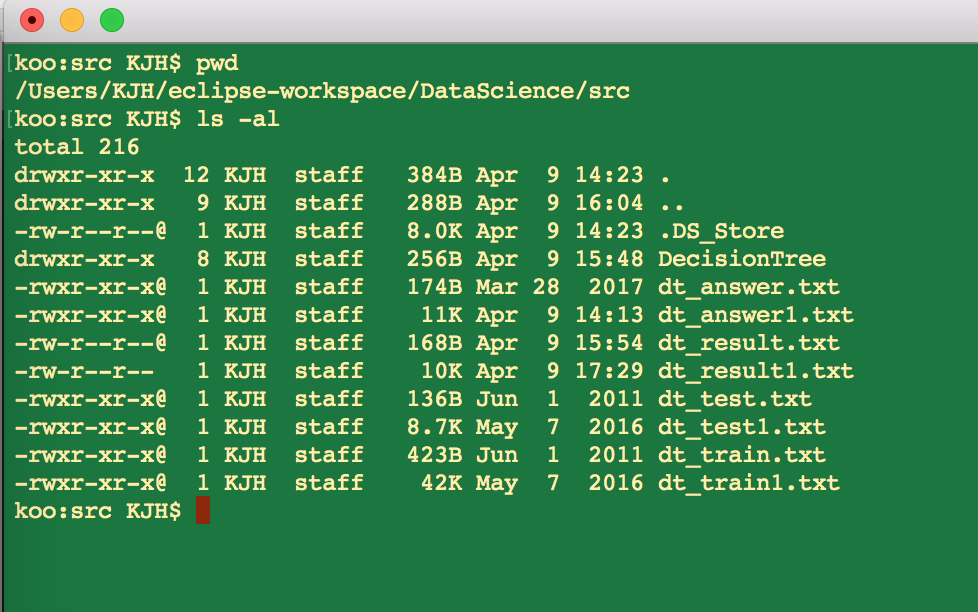
**[entropy]**

**# instruction for complile**

**[Enviorment]**

* OS : Mac OS
* Language : Java

**[Screenshot -** 실행전**]**



**[Screenshot -** 실행방법**]**

compile: $javac DecisionTree/Tree.java

execute : $java DecisionTree/Tree dt\_train1.txt dt\_test1.tst dt\_result1.txt

