დავალება 1

1. public class AsYouLikeIt {

public static string[] text = {

"and, as thou sayest, charged my brother on his blessing to breed me well. And there begins my sadness. "

" My brother Jaques he keeps at school, and report speaks goldenly of his profit. For my part, "

"he keeps me rustically at home or, to speak more properly, stays me here at home unkept; for"

"call you that “keeping” for a gentleman of my birth that differs not from the stalling of an ox? "

" His horses are bred better, for, besides that they are fair with their feeding, they are "

"taught their manage and, to that end, riders dearly hired. But I, his brother, gain nothing "

"under him but growth, for the which his animals on his dunghills are as much bound to him as I. " "Besides this nothing that he so plentifully gives me, the something that nature gave me his "

" countenance seems to take from me. He lets me feed with his hinds, bars me the place of a brother, "

" and, as much as in him lies, mines my gentility with my education. This is it, Adam, that grieves me, "

" and the spirit of my father, which I think is within me, begins to mutiny against this servitude. "

"I will no longer endure it, though yet I know no wise remedy how to avoid it " }

}

2. import java.util.ArrayList;

public class StandardAnalysis {

public ArrayList<String> analyse() { ArrayList<String> output = new ArrayList<String>();

for (String line: AsYouLikeIt.text) {

//remove all punctuation and place in lower case.

String body line.replaceAll("[A-Za-z\\s]", "").toLowerCase();

//split into words

String[] words body.split(" ");

for (String word: words) {

if(word.length() >= 7) {

if (!output.contains(word)) {

output.add(word);

}

}

}

return output; }

3.

import java.util.ArrayList;

public class Main {

public static void main(String[] args) {

StandardAnalysis standardAnalysis = new StandardAnalysis();

ArrayList<String> longwords standardAnalysis.analyse();

for (String word: longwords) {

System.out.println(word);

}

System.out.println ("Total: "longwords.size());

}

4.

import java.util.ArrayList;

public class MapReduceAnalysis {

ArrayList<String> output = new ArrayList<String>();

public ArrayList<String> map (String line){

ArrayList<String> result = new ArrayList<String>();

String body = line.replaceAll("[^A-Za-z\\s]", "").toLowerCase();

String[] words= body.split(" ");

for (String word: words) {

if (word.length()>7){

if(!result.contains(word)) {

result.add(word);

}

return result;

}

}

5.

public void reduce(ArrayList<String> words) {

for(String word: words) {

if(!output.contains(word)){

output.add(word);

}

}

}

6.

Public ArrayList<String> analyze () {

ArrayList<String> output1 =map (AsyYouLike It.text[0]);

ArrayList<String> output2 =map (AsyYouLike It.text[1]);

ArrayList<String> output3 =map (AsyYouLikeIt.text[2]);

ArrayList<String> output4 map (AsyYouLikeIt.text[3]);

ArrayList<String> output5 =map (AsyYouLikeIt.text[4]);

ArrayList<String>output6 map (AsyYouLikeIt.text[5]);

ArrayList<String> output7 =map(AsyYouLikeIt.text[6]);

ArrayList<String> output8 =map (AsyYouLikeIt.text[7]);

ArrayList<String> output9 =map (AsyYouLikeIt.text[8]);

ArrayList<String> output10 =map (AsyYouLikeIt text[9]);

ArrayList<String> output11 =map (AsyYouLikeIt, text[10])

ArrayList<String> output12 =map (AsyYouLike It.text[11])

reduce(output1);

reduce(output2);

reduce(output3);

reduce(output4);

reduce(output5);

reduce(output6);

reduce(output7);

reduce(output8);

reduce(output9);

reduce(output10);

reduce(output11);

reduce(output1);

return output;

}

დავალება 2

1.

import java.util.ArrayList;

import java.util.HashMap;

public class MapReduceVowelCount {

HashMap<String, Integer> output = new HashMap<String, Integer>();

public HashMap<String, Integer> map(String line){

HashMap<String, Integer> result = new HashMap<String, Integer>();

result.put("a", 0);

result.put("e", 0);

result.put("i", 0);

result.put("o", 0);

result.put("u", 0);

char[] chars =line.toLowerCase().toCharArray();

for (char letter : chars) {

String sletter -String.valueOf(letter);

if(result.containsKey(sLetter)) {

result.put(sLetter, result.get(sLetter)+1);

}

}

return result;

}

2.

public HashMap<String, Integer> analyse(){

//Part 1 – map

HashMap<String, Integer> output1 =map (AsYouLikelt.text[0]);

HashMap<String, Integer> output 2 map (AsYouLikeIt.text[1]);

HashMap<String, Integer> output3 map (AsYouLike It.text[2]);

HashMap<String, Integer> output4 #map (As YouLike It.text[3]);

HashMap<String, Integer> outputs map (AsYouLike It.text[4]);

HashMap<String, Integer> output6 map (AsYouLike It.text[5]);

HashMap<String, Integer> output? =map (AsYouLikeIt.text[6]);

HashMap<String, Integer> output8 map (AsYouLikeIt.text[7]);

//Part 2 reduce

output.put("a", 0);

output.put("e", 0);

output.put("i", 0);

output.put("o", 0)

output.put("u", 0);

reduce(output1);

reduce(output2);

reduce(output3);

reduce(output4);

reduce(output5);

reduce(output6);

reduce(output7)

reduce(output8);

return output;

}

3.

import java.util.ArrayList;

public class Main {

public static void main(String[] args) {

MapReduceVowelCount mrvc = new MapReduceVowelCount();

HashMap<String, Integer> results arvc.analyse();

for (String i: results.keySet()) {

System.out.println(i+" "+results.get(i));

}

}

}

დავალება 3.

import java.util.ArrayList;

import java.util.HashMap;

public class Main {

public static void main(String[] args) {

String text = "As I remember, Adam, it was upon this fashion bequeathed me by will but poor a thousand crowns, and, as thou sayest, "

+ "charged my brother on his blessing to breed me well. And there begins my sadness. My brother Jaques he keeps at school, "

+ "and report speaks goldenly of his profit. For my part, he keeps me rustically at home or, to speak more properly, stays"

+ " me here at home unkept; for call you that “keeping” for a gentleman of my birth that differs not from the stalling of an ox?"

+ " His horses are bred better, for, besides that they are fair with their feeding, they are taught their manage and, to that end, "

+ "riders dearly hired. But I, his brother, gain nothing under him but growth, for the which his animals on his dunghills are as "

+ "much bound to him as I. ";

ArrayList<String> output = new ArrayList<String>();

String body = text.replaceAll("[^A-Za-z\\s]", "").toLowerCase();

String[] words = body.split(" ");

for (String word : words) {

if (word.length() >= 7) {

if (!output.contains(word)) {

output.add(word);

}

}

}

for (String word : output) {

System.out.println(word);

}

HashMap<String, Integer> result = new HashMap<String, Integer>();

for (String word : words) {

if (word.length() >= 7) {

if (result.containsKey(word)) {

result.put(word, result.get(word) + 1);

} else {

result.put(word, 1);

}

}

}

for(String key: result.keySet()) {

System.out.print(key);

System.out.print(", ");

System.out.println(result.get(key));

}

}

}