Write a program to given a string paragraph and a string array of the banned words banned, return the most frequent word that is not banned. It is guaranteed there is at least one word that is not banned, and that the answer is unique.

CODE:

import java.util.\*;

public class MostFrequentWord {

public static void main(String[] args) {

Scanner scanner = new Scanner(System.in);

System.out.println("Enter the paragraph:");

String paragraph = scanner.nextLine();

System.out.println("Enter the banned words (comma-separated):");

String bannedString = scanner.nextLine();

String[] banned = bannedString.split(",");

scanner.close();

String result = findMostFrequentWord(paragraph, banned);

System.out.println("The most frequent word not banned is: " + result);

}

public static String findMostFrequentWord(String paragraph, String[] banned) {

Set<String> bannedSet = new HashSet<>(Arrays.asList(banned));

Map<String, Integer> wordFreq = new HashMap<>();

String[] words = paragraph.toLowerCase().split("\\W+");

for (String word : words) {

if (!bannedSet.contains(word)) {

wordFreq.put(word, wordFreq.getOrDefault(word, 0) + 1);

}

}

String mostFrequentWord = "";

int maxFrequency = 0;

for (Map.Entry<String, Integer> entry : wordFreq.entrySet()) {

if (entry.getValue() > maxFrequency) {

maxFrequency = entry.getValue();

mostFrequentWord = entry.getKey();

}

}

return mostFrequentWord;

}

}

OUTPUT:

C:\javap>javac MostFrequentWord.java

C:\javap>java MostFrequentWord

Enter the paragraph:

My name is Aashrita. I am from Vizag. I studied in Timpany School.

Enter the banned words (comma-separated):

from

The most frequent word not banned is: i

