CAP:680 JAVA PROGRAMMING LANGUAGE LABORATORY

ASSIGNMENT-4

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Q.1. There is a situation in a given message of few sentences, I would like to see keywords has occurrence at least three times and if no such occurrence is found, it that case find out the words which is biggest in size also find the word which is lowest is size.

Ans: -

```java
import java.util.*;

public class KeywordFinder {

  public static void main(String[] args) {

    String message = "Lorem ipsum dolor sit amet, mathematicsmath adipiscing elit. Sed euismod justo eu urna blandit, ab mattis urna tempor. Fusce eu lacus non ipsum vestibulum maximus. Aliquam erat volutpat. Nulla facilisi.";

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

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

    // count frequency of each word

    for (String word : words) {

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

    }

    List<String> keywords = new ArrayList<>();

    String biggestWord = "";

    String smallestWord = words[0];
```

```java
        // find keywords and biggest/smallest words
    for (String word : frequencyMap.keySet()) {
        int frequency = frequencyMap.get(word);
        if (frequency >= 3) {
            keywords.add(word);
        }
        if (word.length() > biggestWord.length()) {
            biggestWord = word;
        }
        if (word.length() < smallestWord.length()) {
            smallestWord = word;
        }
    }
    if (keywords.size() > 0) {
        System.out.println("Keywords: " + String.join(", ", keywords));
    } else {
        System.out.println("No keywords found.");
    }
    System.out.println("Biggest word: " + biggestWord);
    System.out.println("Smallest word: " + smallestWord);
  }
}
```

```
PROBLEMS  13    OUTPUT    DEBUG CONSOLE    TERMINAL

No keywords found.
Biggest word: mathematicsmath
Smallest word: ab
PS D:\VS CODE\JAVA PROGRAM\ASSIGNMENT>
```