

## Exercise 1

```
public static Map<String, Integer> analyzeText(String text) {
    //If something is invalid, return with Exception
    if (text == null || text.isEmpty()) {
        throw new IllegalArgumentException("Text cannot be
            null or empty");
    }
    String[] words = text.split("\\s+");
    Map<String, Integer> wordCount = new HashMap<>();
    for (String word : words) {
        word = word.replaceAll("[^a-zA-Z]", "").toLowerCase();
        if (!word.isEmpty()) {
            wordCount.put(word, wordCount.getOrDefault(word,
                0)+1);
        }
    }
    return wordCount;
}
```

LOC → LINES of code, every line counts → 18

NON-BLANK LOC → all non-blank lines → 15

SLOC → source lines of code - 10

LLOC → logical-number of program statements - 9

For this program, density of comments is little low, because I found, that normal density should be 20-30%