

src/Lab8.java

```
1  /*
2  Name: Hunter Poole
3  Date: 3/17/25
4  Lab #: 8
5  Source Code: Lab8.java
6  Action: Asks for a sentence, then passes that sentence to a function.
7           That function will count spaces, lower case chars, and vowel chars.
8           Function will then print counts.
9  */
10
11 import java.util.Scanner;
12
13 public class Lab8
14 {
15
16  /*
17  Action: Takes a string, counts spaces, lower case chars and vowel chars. Prints
18  counts.
19  Parameters: String X
20  Returns: void
21  Precondition: A not-empty string needs to be provided.
22  */
23
24  static void StringPartsCalculator(String X)
25  {
26      int SpaceCount = 0, LowerCaseCount = 0, VowelCount = 0;
27      String X_LowerCase;
28
29      X_LowerCase = X.toLowerCase();
30
31      for (int i = 0; i < X.length(); i++)
32      {
33          if (Character.isWhitespace(X.charAt(i)))
34          {
35              SpaceCount++;
36          }
37
38          if (Character.isLowerCase(X.charAt(i)))
39          {
40              LowerCaseCount++;
41          }
42
43          if (X_LowerCase.charAt(i) == 97 || X_LowerCase.charAt(i) == 101
44              || X_LowerCase.charAt(i) == 105 || X_LowerCase.charAt(i) == 111
45              || X_LowerCase.charAt(i) == 117)
46          {
47              VowelCount++;
48          }
49      }
50  }
```

```
47         }
48     }
49
50     System.out.printf("%n%s %d %n%s %d %n%s %d%n", "Vowels =", VowelCount,
51         "Spaces =", SpaceCount, "Lower case =",
LowerCaseCount);
52     }
53
54     public static void main(String[] args)
55     {
56         String Sentence;
57
58         Scanner Input = new Scanner(System.in);
59         System.out.println("Please enter a sentence");
60         Sentence = Input.nextLine();
61
62         StringPartsCalculator(Sentence);
63     }
64 }
65
66 /*
67 Please enter a sentence
68 This is a lovely Day.
69
70 Vowels = 6
71 Spaces = 4
72 Lower case = 14
73
74 Please enter a sentence
75 This is my TRULY unique test tExt! !!
76
77 Vowels = 9
78 Spaces = 7
79 Lower case = 20
80 */
```