

```
15 scanner.close();
16
17 // Call the method to remove vowels and print the result
18 String result = removeVowels(input);
19 System.out.println("String after removing vowels: " + result);
20 }
21
22 // Method to remove vowels from the input string
23 public static String removeVowels(String str) {
24     // Convert the string to uppercase for case-insensitive comparison
25     str = str.toUpperCase();
26
27     // Create a string to hold the result
28     StringBuilder result = new StringBuilder();
29
30     // Loop through each character in the string
31     for (int i = 0; i < str.length(); i++) {
32         char c = str.charAt(i);
33
34         // Check if the character is a vowel
35         if (c != 'A' && c != 'E' && c != 'I' && c != 'O' && c != 'U') {
36             result.append(c); // Append the character to result if it's not a vowel
37         }
38     }
39
40     // Return the new string with vowels removed
41     return result.toString();
42 }
43
44
45
46
```

Outline ×

- lab11
- > RemoveVowels

@ Javadoc Declaration Console ×

```
<terminated> RemoveVowels [Java Application] C:\Users\josef\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe
Enter a word or sentence:
COMPUTER APPLICATIONS
String after removing vowels: CMPTR PPLCTNS
```

LongestWord.java ×

```
10 // Input the sentence
11 System.out.print("Enter a sentence: ");
12 String sentence = scanner.nextLine();
13
14 // Split the sentence into words using space as the delimiter
15 String[] words = sentence.split(" ");
16
17 // Initialize variables to store the longest word and its length
18 String longestWord = "";
19 int maxLength = 0;
20
21 // Loop through each word in the array
22 for (String word : words) {
23     // If the current word is longer than the previously stored longest word
24     if (word.length() > maxLength) {
25         longestWord = word; // Update the longest word
26         maxLength = word.length(); // Update the maximum length
27     }
28 }
29
30 // Output the longest word and its length
31 System.out.println("The longest word: " + longestWord);
32 System.out.println("The length of the word: " + maxLength);
33
34 // Close the scanner to prevent resource leak
35 scanner.close();
36 }
37
38
39
40
```

Outline ×

- lab11
 - LongestWord

@ Javadoc Declaration Console ×

<terminated> LongestWord [Java Application] C:\Users\josej\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64-

```
Enter a sentence: football
The longest word: football
The length of the word: 8
```

```
1 // Create a Scanner object to read input from the user
2 Scanner scanner = new Scanner(System.in);
3
4 // Accept the full name from the user
5 System.out.print("Enter full name (First Middle Last): ");
6 String fullName = scanner.nextLine();
7
8 // Split the full name into an array of words (first, middle, last)
9 String[] nameParts = fullName.split(" ");
10
11 // Initialize the result string to build the short form
12 StringBuilder shortForm = new StringBuilder();
13
14 // Loop through the name parts except the last name
15 for (int i = 0; i < nameParts.length - 1; i++) {
16     // Take the first letter of the first and middle names and append "."
17     shortForm.append(nameParts[i].charAt(0)).append(". ");
18 }
19
20 // Append the last name without any modification
21 shortForm.append(nameParts[nameParts.length - 1]);
22
23 // Output the short form of the name
24 System.out.println("Short form: " + shortForm.toString());
25
26 // Close the scanner
27 scanner.close();
28
29 }
30
31
32
33
34
35
36
37
38
```

Outline ×

- lab11
- > NameShortForm

@ Javadoc Declaration Console ×

```
<terminated> NameShortForm [Java Application] C:\Users\josej\Downloads\spring-tool-suite-4-4.26.0.RELEASE-e4.33.0-win32.win32.x86_64\sts-4.26.0.RELEASE\plugins\org.eclipse.justj.openjdk.hotspot.jre.full.win32.x86_64.jre\bin\java.exe
Enter full name (First Middle Last): selin christon sofia
Short form: s. c. sofia
```