

```
public static int compute(String word) {  
    char[] letters = {'a', 'e', 'i', 'o', 'u'};  
    int result = 0;  
    for (int i = 0; i < word.length(); i++) {  
        for (int j = 0; j < letters.length; j++) {  
            if (word.charAt(i) == letters[j]) {  
                result++;  
            }  
        }  
    }  
    return result;  
}
```

The image shows a network diagram overlaid on a Java code snippet. The code is for a method named `compute` that takes a `String word` and returns an `int`. It counts the number of vowels in the word. The code is as follows:

```
public static int compute(String word) {  
    char[] letters = {'a', 'e', 'i', 'o', 'u'};  
    int result = 0;  
    for (int i = 0; i < word.length(); i++) {  
        for (int j = 0; j < letters.length; j++) {  
            if (word.charAt(i) == letters[j]) {  
                result++;  
            }  
        }  
    }  
    return result;  
}
```

The network diagram consists of nodes (colored circles) and edges (colored lines). The nodes are distributed across the code, with a high density in the nested loops. The edges connect nodes that are related in the code, such as nodes representing the same variable or related expressions. The nodes are colored in shades of purple, orange, and yellow. The edges are colored in shades of purple, orange, and yellow. The network diagram is a complex graph with many nodes and edges, representing the relationships between different parts of the code.