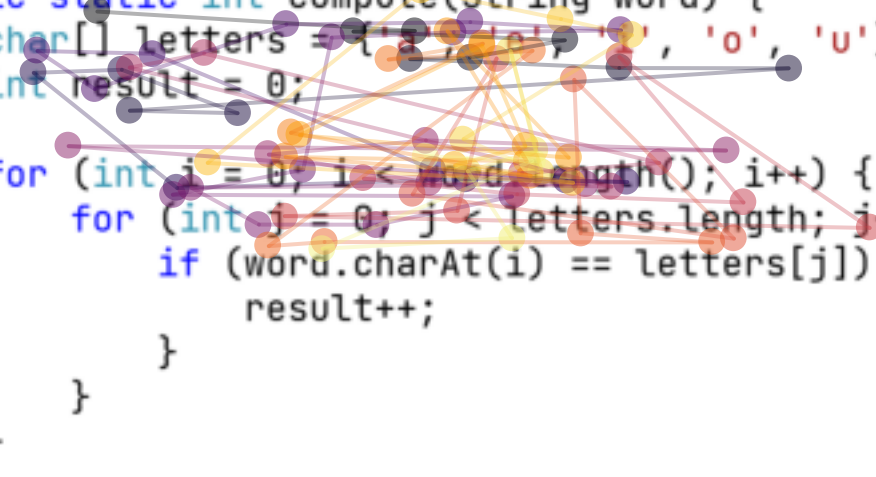


```
public static int compute(String word) {  
    char[] letters = {'a', 'e', 'i', 'o', 'u'};  
    int result = 0;  
  
    for (int i = 0; i < word.length(); i++) {  
        for (int j = 0; j < letters.length; j++) {  
            if (word.charAt(i) == letters[j]) {  
                result++;  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

A network diagram is overlaid on the code. It consists of numerous nodes, represented by colored circles in shades of purple, blue, yellow, and orange. These nodes are interconnected by a web of thin, colored lines (edges) in matching colors. The connections are dense, particularly in the middle section of the code where the nested loops are located, suggesting a complex flow or dependency graph. Some nodes are placed directly over the code text, while others are positioned in the margins.