

```
public static int[] compute(int[] numbersArray) {  
    for (int i = 0, i < numbersArray.length(), i++) {  
        numbersArray[i] = numbersArray[i] * 2;  
    }  
    return numbersArray;  
}
```

The diagram illustrates the control flow of the provided Java code. It features several colored nodes connected by lines: a grey node at the start of the method, purple nodes along the loop's execution path, red nodes at the loop's entry and exit points, orange nodes for the array modification, and yellow nodes for the return statement. The lines show the sequence of execution from the method call to the return statement.