

```
public static boolean compute(String word) {  
    boolean result = true;  
    for (int i = 0, j = word.length() - 1; i < word.length() / 2, i++, j--) {  
        if (word.charAt(i) != word.charAt(j)) {  
            result = false;  
            break;  
        }  
    }  
    return result;  
}
```

The diagram illustrates the execution flow of the provided Java code. It uses colored dots and lines to show the sequence of execution:

- Initial State:** A purple dot is at the start of the method.
- Initialization:** A yellow dot is at the line `boolean result = true;`.
- Loop Entry:** A purple dot is at the start of the `for` loop.
- Loop Body:** A yellow dot is at the start of the `if` statement.
- Break Statement:** A purple dot is at the `break;` statement.
- Return Statement:** A purple dot is at the `return result;` statement.
- Flow Lines:** Lines connect the dots in the following order: purple (start) to yellow (initialization), yellow to purple (loop entry), purple to yellow (loop body), yellow to purple (break), purple to purple (return), and purple back to purple (loop entry).