

```
public static float compute(int[] numbers) {  
    int number1 = 0;  
    int number2 = 0;  
  
    while (number1 < numbers.length) {  
        number2 = number2 + numbers[number1];  
        number1 = number1 + 1;  
    }  
  
    float result = number2 / (float) number1;  
    return result;  
}
```

The diagram illustrates the control flow of the provided Java code. Nodes, represented by colored circles, mark key points in the execution: the start of the function, the initialization of `number1` and `number2`, the entry into the `while` loop, the execution of the loop body (specifically the assignment statements), the exit from the loop, and the final `return` statement. Edges, shown as colored lines, represent the flow of execution between these nodes. The flow starts at the function signature, proceeds to the variable declarations, then enters the `while` loop. Inside the loop, it follows the sequence of assignments. After the loop terminates, the flow proceeds to the calculation of `result` and the `return` statement, finally exiting the function.