

```
public static float arrayAverage(int[] numbers) {  
    int count = 0;  
    int sum = 0;  
    while (count < numbers.length) {  
        sum = sum + numbers[count];  
        count = count + 1;  
    }  
    float average = sum / (float) count;  
    return average;  
}
```

The diagram illustrates the control flow of the provided Java code. It features several colored circular nodes connected by arrows. Purple nodes are positioned above the initialization of 'count' and 'sum'. Orange nodes are placed at the start of the 'while' loop, at the end of its body, and at the calculation of the 'average'. Yellow nodes are located at the end of the 'while' loop body and at the 'return' statement. Arrows indicate the sequence of execution: from the start to the first orange node, then to the purple nodes, then to the orange node before the loop, then to the yellow node at the end of the loop body, then to the orange node after the loop, then to the yellow node at the return statement, and finally to the end of the method.