

```
public static int compute(int number) {  
    int result = 0;  
    while (number != 0) {  
        result += number % 10;  
        number /= 10;  
    }  
    return result;  
}
```

The diagram illustrates a network of nodes and edges overlaid on the code. Nodes are represented by colored circles (purple, yellow, orange, red) and edges by colored lines. The nodes are distributed across the code, with a dense cluster in the middle section (while loop) and more sparse nodes at the beginning and end. Edges connect nodes across different lines of code, such as from 'number' in the while loop to 'number' in the parameter list, and from 'result' in the return statement to 'result' in the initialization.