

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

The diagram illustrates the recursive process of the `compute` function. It shows a call tree where nodes represent function calls and edges represent the flow of execution. The nodes are colored based on their position in the tree: purple for the initial call, orange for recursive calls, yellow for the base case, and red for the return values. The tree starts from the `if` block and branches out to the `return` block, illustrating the recursive process of calculating the sum of digits.